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How the South May Regain Power.

In Commending the tone of a letter from the editor of the Manufacturers' Record to the promoters of the proposed Huntsville Industrial Convention, the Charleston News and Courier says:

Should the Huntsville Convention really succeed in creating an enthusiasm for "business as opposed to small politics," it would be entitled to be reckoned in the future among the greatest events in the history of the South. In former times, if we had attended more to our own affairs and less to those of the nation, we would have escaped the long term of industrial and commercial bondage which we are now serving out under less glorious but more thrifty sections of the country. While playing politics, large and small, the South made many luminous pages in history, in admiration of which we allow no one precedence over ourselves, but while doing so she permitted the North and East to so outstrip her in forethought in material affairs that they were enabled, when the supreme moment came, to successfully maintain that wrong was right to our ruin and to the perversion of the government which we had done so much more than they to conceive and establish. The day when statecraft ruled the nation is dead and gone. The Washingtons, Jeffersons, Calhouns and Clays of the hour are the men who control vast industrial and manufacturing interests—the men who have accumulated uncounted millions, and who employ the power that comes with their possession to mold thought and legislation and history. If the South is ever to regain the supremacy which she once enjoyed in directing the trend of national events it will be when her people have developed the unequalled resources of their heritage and can oppose dollars with dollars in the strife for control and direction.

In this last paragraph the News and Courier has but touched the same key upon which the Manufacturers' Record has for years played. The world has changed from politics for politics' sake to commerce and industry. The commercial spirit rules the world. Germany's erratic, but, from a commercial point of view, progressive Emperor is in reality but a great leader of the forces that are fighting for Germany's commercial supremacy. Statecraft with him is but the best way to advance the industrial life and thus the wealth and power of his empire. England is ruled by commerce and trade. Russia is carrying on probably the greatest campaign of industrial up-building ever undertaken by any nation in the world's history. With the building of her mighty railway system, the opening up of coast areas to new population and industrial effort, the creation of new ports, great manu-

facturing centers are growing up, and in this the Czar realizes that there is more of glory and of wealth than in all the military possibilities of his country. This commercial spirit which dominates the world and in which theorists have seen only evil, is a great step in civilization's advance over the military spirit of the past.

It is only too true, as the News and Courier says, that the South theorized while the North and West were bending their energies to the tangible development of wealth. Throughout the world today wealth is power. That and not the size of a nation's army is the real test of its power. And if the South wants to be mighty and powerful it must realize that this position can be attained only through the fullest development of its wealth-creating advantages. Let its people be taught that the man who builds and makes profitable a furnace or a cotton mill, or the man who manages a great railroad, is today a greater benefactor, because he is creating employment for his fellow-man, than the orator who charms his hearers by his well-rounded sentences. If it be claimed that this is putting too high an estimate upon material affairs, it may be said in reply that the higher development of a nation's aesthetic life comes after, not before, its advancement in material prosperity. Take any community, large or small, where wealth is decaying, and with the steady increase of poverty there is a steady downward tendency in spiritual and moral life. And so from every point of view the South should bend its energies to the employment of its people and the creation of wealth commensurate with its resources. Then once again, and not until then, will it regain its power in the nation's affairs.

Tasks of Railroads.

One of the most matter-of-fact, sensible papers presented to the farmers' institute for West Tennessee at Jackson was that of Col. J. B. Killebrew, who discussed the relation of railroads to farmers. He said that railroads and agriculture were dependent upon each other; that railroads have advanced agriculture more than all other agencies combined; that they multiplied production almost beyond calculation, and that they are the best of educators. He quoted figures to show the effect of railroad building in Southern States, explaining how they fostered industries, and, consequently, enlarged the market for farmers' products, and said:

Freights are being reduced all over the United States, and this reduction comes as the carrying capacity of roads is increased by using larger cars and heavier engines. The rates on ordinary freight now are not one-half as great as they were twenty-five years ago. In this gradual reduction the farmers come in for their full share of the benefits. They should give every encouragement to the railroads to make such improvements as will justify them in lowering the freight tariffs.

Unthinking men are sometimes made to

believe that railroad managers levy contributions upon the country to pay large dividends on watered stock. This may have been true in some instances, but do the farmers ever reflect that money invested in building railroads have also watered the prices of their lands much more than they have the stock of the railroads. If it is true that railroads make dividends on watered stock, do not the farmers in those regions where railroads are built enjoy cheaper freights than they did by wagon carriage? Is it not true that their landed property has been increased in value by reason of the investment made in building these railroads, to which they contributed nothing? The stockholders of the railroads take the risk and divide the profits with the farmers by increasing the prices of their lands and products, opening new markets and reducing the expense of taking farm products to market?

We often hear the cry that railroads are monopolies, and that they crush out everything that opposes them. If the railroads are monopolies, how does it happen that their stock is found for sale in every broker's office, especially in the larger cities? If the railroads are making so much money, why do not the farmers buy some of this stock and participate in the profits? Who is to hinder them? The very fact that these dissatisfied persons do not buy stock in railroad companies is proof positive that they do not believe what they say when they speak of railroads as grasping monopolies. The truth is that prosperous farmers make prosperous railroads, and prosperous railroads aid farmers of every class and condition. Railroads equalize prices so that those remote from markets enjoy nearly the same advantages as if they lived near. A slight increase in production will pay the cost of getting to market.

These words, addressed to intelligent farmers, should bear fruit in the prevention of legislation threatening to wreck railroads by compelling them to make rates for passengers and freight below the cost of operation. The man who invests his money in railroads has just as much right to expect an income from that investment as the farmer who invests his time, labor and money in the soil has a right to expect adequate returns. Neither the railroads nor the farmers can afford to antagonize each other. Left to themselves, untouched by the guile manifested on the stump or brute force exercised in legislative bodies of self-seeking politicians, neither the railroads nor the farmers would be likely to persist in conduct bound to cause loss to both. In common understanding that extravagance of action by either must affect both disastrously, each of the elements of Southern progress will work harmoniously with the other to mutual profit.

Round-Baling Facts.

According to the Raleigh (N. C.) Post, Major James W. Wilson of Weldon, N. C., who managed the only round-bale press operated in North Carolina last season, offered to the management of the State farms to receive its seed-cotton on the cars at the depot nearest the farms, to pay the freight to Weldon, gin with the most approved machinery, to furnish the bagging, to deliver the bales free of charge on board of cars at Weldon, to buy the cotton for cash at the market prices of the square bale of the same grade the day it was or-

dered to be shipped, and to buy all seed at the highest market price. He called attention to the fact that the price for ginning and furnishing the bagging and ties for the square bale is \$1.75 a bale, and estimated that the State, with a crop of 3000 bales, would save \$5250 by baling by the new process. He denies that the round-baling process is a trust, and writes:

There is no trust about it. The machinery is furnished and kept in repair by the American Cotton Co. For its use I pay them a royalty, but am under no obligation legally or morally to sell to them the output if I can get a better price from any other cotton buyer. Only think of it, \$1.75 per bale lost to the planters of North Carolina by a false prejudice. . . . In my opinion, this press is destined to revolutionize the cotton industry, and has come to stay, notwithstanding the position of those conservative old gentlemen who would stop progress by clinging to its tail and crying whoa! whoa!

The Post, which publishes this interesting letter from Major Wilson, who for many years has been one of the leading men in the State, announces that other similar plants are being established in North Carolina, and that anybody may rent a plant who desires to do so, and that the round-bale company concern is not a trust nor controlled by one. It adds:

So the whole matter resolves itself into the relative merits of the old and the new systems. If it is economy to the farmer to sell his cotton to the lessees of or have it baled by the new method he will do so; if not, he will continue the old, as he should do. There is lively competition between the two methods which is no disadvantage to the farmer, and it becomes the latter to study the claims and merits of each and use that which secures to him the best results.

Just like other important inventions, that which proves the greatest utility and of the greatest economy will succeed best. We believe, like inventions which have supplanted others before them, this new method of baling cotton is here to stay, to at least do much by way of cheapening, if not bettering, the handling of the great Southern crop in its transfer from the field to the factory. It should be considered upon its merits, just like any other competitor for popular use, and patronized only as its merits will justify.

Farmers, in this day of close economy in all things, will not or should not reject a really meritorious agent simply because it is new, or even belongs to a trust. In this day he is a wise man who buys and sells where he can do the best for himself, and use all agencies which will give him the best returns for his labor or money.

This editorial is one of the most sensible utterances regarding the round bale which has appeared in the Southern press. It deals with the subject from a practical standpoint, without regard to political or business demagoguery or the halting spirit which in every age has antagonized improvements because they were new.

The contract has been let for the construction of the sewerage system at Jackson, Miss., and work upon it is expected to begin within thirty days, and to be completed within nine months. The determination to have a sewerage system at Jackson is a result of the fever scare a year ago. In spite of similar apprehension at present, Jackson is nevertheless to be congratulated upon the fact that it is within sight of

protection from further disasters of the kind in the future. A sewerage system in any city is the beginning of that cleanliness in the midst of which yellow fever and other malignant evils may not exist.

To Regulate Cotton.

There is to be another cotton convention in the South, this time at Atlanta, in October. The convention does not seem to be designed for the passing of resolutions by representatives of probably one two-hundredths of the planters of the South that the acreage of cotton ought to be reduced. Its purpose seems to be the devising of means whereby the growers may cease to be the annual victims of speculators. Its plan is to take steps whereby bankers and farmers may both be benefited by widening the basis of cotton as collateral. Of course, the most feasible suggestion in that much to be desired direction is that of the establishment of the bonded or surety warehouse system which the Manufacturers' Record has been advocating for several years, and which is already in successful operation in more than one point in the South. By it the farmer owing money is saved from sacrificing his cotton at the opening of the market by being permitted to use storage certificates in negotiating loans at local banks. At the same time his ability to hold his cotton for a more favorable market hastens the coming of that market. It is hoped that the convention will be representative of the whole South. But even should it represent only Georgia and one or two adjoining States, it will be of benefit to the whole cotton-growing South if it bring about the organization of but one bonded cotton warehouse.

Railroad Construction.

Apprehension seems to exist in some quarters that railroad construction in this country is being overdone. It must be remembered that the railroads are largely responsible for the revival of industrial activity. Nearly two years ago they began to recover from the depression which has continued for nearly four years. An index of the country's prosperity, the railroads are also gifted to some extent as prophets. As soon as they were able they began to put into effect plans for improvements and extensions which had been temporarily suspended. To that must be attributed, directly or indirectly, much of the spur given to iron and steel production. It is apparent that railroad construction is to continue for several months at least. Whatever may be the situation in other parts of the country, there is little, if any, evidence in the South that the actual work being done is anything but necessary to meet the demand for transportation of mineral, agricultural and industrial products. The reports of such leading systems as the Southern Railway, the Chesapeake & Ohio and the Norfolk & Western indicate that railroad development and railroad management in the South have reached a plane of common sense, practical methods, capable not only of repairing the errors of the past, but also of escaping possible ones of the future.

All cities from Rome, Ga., to Mobile, Ala., along the Coosa river, have been invited to send delegates to a convention at Gadsden on September 26 to start a movement to secure a large appropriation from Congress for the improvement of the Coosa.

ENGLAND'S BLACK COUNTRY.

Impressions of the Iron and Coal Producing Regions.

[Staff Correspondence Manufacturers' Record.]

Birmingham, England, August 27.

To fully appreciate the iron and steel trade in Great Britain one should visit the various districts and make a personal investigation if possible. You can get considerable general information in London and other cities, such as Sheffield and Birmingham, but the most reliable data must be obtained in the heart of the districts within hearing of the rumble of the machinery and in sight of the smoke from the chimneys. Of this I am convinced after a trip which took me through the center of England's "Black Country," as it is called. One gets glimpses of it from the car windows, but these form a faint conception of what it is. Birmingham is on the edge of it and Wolverhampton on the other.

Really there is no country. For miles and miles the iron, steel and other industries stretch out, each with its cluster of tenements for workmen, the villages being so close to one another as to really form one great community. Occasionally a common a few hundred feet in extent is noticed, where scanty patches of herbage struggle for existence amid the soot and cinders constantly falling from the thousands of stacks. Here and there stands a tree, but its leaves have turned from green to a sickly grayish hue, and even the natural color of the trunk and limbs are hidden by the dirt, which covers everything like a pall and which so fills the air in the "Black Country" that a slight breeze turns it into a dust storm like that of the Sahara, only worse, if possible. These are merely facts based on personal experience. Occasionally rain clears the air, and then the people of the "Black Country" can draw a little ozone into their lungs, but this summer has been remarkably dry, and they have most of the time been under a cloud.

Small wonder it is called the "Black Country," when for over 300 years men have been steadily extracting the coal and ore which underlie it. And now its wonderful natural resources are being gradually but surely exhausted. This is a fact that I have learned by actual observation, and it is verified by the statements of men who have been working here all their lives. It is not strange when one considers that the Birmingham or South Staffordshire district, as it might more appropriately be called, is one of the oldest manufacturing sections in the world, and the most ancient in Great Britain. Many of the companies operating collieries and furnaces over a century have owned mineral deposits of such wealth that the coal, ore and limestone could be procured within an area of a quarter of a mile from the buildings themselves. Much of the coal has existed in pockets, so to speak, thirty yards in thickness by actual measurement, while the ore veins have lain so close to the surface that many of them have been worked from lateral openings entirely at a very small expense. The district is literally honeycombed with galleries, and it is safe to say that there is not an area 100 feet square that has not been examined to ascertain its mineral possibilities. But, as I have already stated, some of the ironmasters and steel-makers realize at last that the limit is nearly reached. Not a few have already exhausted their fuel area, and are securing a supply by canal and rail from a distance at an additional expense for transportation and labor. Some of the larger furnaces are

reducing ore from Oxford and Northampton, carried seventy-five to 100 miles by rails or water and then transferred to wagons or tram cars and thus carried to the works. A few utilize Spanish ore, but the total quantity is inconsiderable. As might be expected, quite a number of collieries have been abandoned, and until the general revival in the iron trade, one could find many a smokeless chimney among the blast furnaces, but, thanks to the demand for iron, every plant capable of being put in blast has been lighted, for there is a fair profit at present prices in every ton turned out, in spite of the disadvantages under which so many of the companies labor. But the demand is extraordinary, and none of the more conservative producers believe it is to be permanent.

And here is the point which will especially interest American and especially Southern iron and steel-makers. So long as the present demand continues the Birmingham companies do not fear competition, but when it ceases and they are obliged to seek a distant market or to go outside the local consumers, it is very probable that they cannot compete with the States, for the simple reason that they cannot make the metal of the same quality as cheaply or even obtain as favorable transportation. Here are some of the reasons: To begin with, the furnaces in this district, except in possibly a half-dozen instances, do not compare with those in Alabama or Southwest Virginia in equipment or size. The largest do not turn out above eighty tons in twenty-four hours, and some are now at work which have a capacity of only thirty tons. In fact, the largest furnaces in Great Britain (in the Cleveland district) are of 110 tons. In this section the plants are what we would call old-fashioned in most cases. They have no methods for economizing fuel. But few companies endeavor to secure any by-products. Their blowing engines are of antiquated pattern and limited power. Gas which could be used as a fuel and for heating escapes into the air and is wasted. As I have already stated, much of the raw material must be carried a considerable distance to the plants at an additional expense. Right here I might say that one of the largest steel companies pays a shilling a ton (about twenty-four cents) for carrying its coal a distance of ten miles. Most of the finished product goes by rail, and a combination exists between the railroad companies, which renders them able to make as high tariff as they please. To illustrate, one company cannot take contracts to furnish ordinary soft steel f. o. b. vessel at the nearest seaport, 120 miles distant, at less than £8 per ton.

The canal is practically no competitor to the railroads, as an understanding exists between its owners and the rail companies. Its facilities are very limited, and the boats, which can carry about ninety tons each, are utilized principally for hauling ore and coal.

As to the cost of producing pig, the only figures which can be given in this district are those for raw material, fuel and labor, as the reduction varies so much according to the character and capacity of the furnace.

I think there is no doubt that American iron-makers will have as little competition in future from this district as from any in Great Britain, although in some of the other districts iron may cost more

at present. There is every indication that raw material will never be much cheaper hereabouts, as the distance between the works and the source of supply will steadily increase. What can be said of the iron works can be said of the steel plants to a great extent. About all are very old works. Although the basic, Bessemer and the Siemens processes are used, none has the improvements with which the American works built within the last five or ten years are furnished, with possibly one exception. Such a plant as is being completed at Ensley has no rival in Great Britain. Some have their own coke ovens, and one or two steel companies operating blast furnaces in connection are planning to utilize the gases for fuel, but it can safely be said that not one has in operation such equipment for saving the by-products as can be found in works in Pennsylvania or in Alabama. Of course, no rails are now made around here save a few light sizes for tramroads, but I understand on good authority that the plants in the Middlesbrough district are behind such works as the Maryland and the Carnegie in modern machinery, and their facilities are limited in comparison.

The policy of consolidation by which iron and steel-making has been so greatly reduced in cost in the States is almost unknown here apparently. At least it has not been followed. Scattered over the district are numerous iron companies, some not turning over 500 tons weekly. No company employs above 1500 men. Works producing precisely the same grades of steel and iron are operated by competing companies within a quarter of a mile of each other. As a result each plant, no matter how small, must have its office force, its managers or superintendents, its salaried directors. Each must have its individual power plant, with the necessary engineers, firemen, etc. Everywhere can be found opportunities for combination which would reduce the cost of operation by a large percentage, but as I have noted, our friends seem to have not given it a thought.

Some of the companies might remodel their works, but as yet have not realized enough profit from the present revival to do so. A few of the producers, however, are very much alive to what foreign, and especially Southern, competition means. I met one prominent chemist who had been analyzing some of the Southern ore sent to England, also samples of the pig iron and steel which is used for bicycle tubing. He stated that the same quality of steel could readily be made in the Birmingham district, but as to the price, that was a question. He was surprised at the richness of the ore, and admitted that the iron was of a very fine quality. Naturally he would say nothing as to the cost of the same grade if made in England. Some of the companies realize the necessity of saving the by-products, and are making experiments in turning cement from slag similar to that made at Sparrow's Point and elsewhere in the States. There is a prospect that several works will be built for saving the by-products of the coke ovens and for making compounds based on coal tar, but both of these industries are as yet in their infancy. Electricity for power purposes is as yet new to this section, although so extensively utilized in and around Sheffield. I did not hear of any of the larger corporations who used even electric or compressed air motors for operating their trams.

To sum it all up, one has no conception of the backwardness of the processes for manufacturing iron and steel in Staffordshire until he sees for himself the character of the plants. He will then be no longer surprised that American metal producers have been so successful in the

very heart of Britain in finding a market. And I found one or two manufacturers here willing to admit it. Here is the statement of the managing director of one of the principal companies, a man who has been forty years connected with the Birmingham section. I asked him if he would give me his actual views on the outlook, promising not to use his name for obvious reasons. In reply he said: "In my opinion, it is only a question of time before the Americans will force us to go into manufacturing specialties or close our works. It is true that the ironstone and coal of this district are nearly exhausted. For several years we have been obliged to have 4000 tons of ironstone weekly transported from as far as Oxford, a distance of sixty miles. As long as trade continues as at present we can sell our product you might say at home, but the demand is abnormally great. I do not think it will last above two years, then we will feel American competition. Your deposits of ironstone in the South and coal in your Southern States are so immense and so rich that you must make iron more cheaply, while you can get a low rate by placing it on cotton ships. But I believe that you also will be able to sell ordinary steel here at even a lower price, proportionately, than our makers, for steel depends, of course, largely upon the cost of the iron. When you have the mines at your furnace doors, and can get coal as low as five and six shillings a ton, as I understand, it is useless for me to assert that we can hold our own in this section. Why we are now paying from twelve to fourteen shillings a ton for our coal delivered here at the works. No, the Birmingham district will not be affected, as far as general manufacturing is concerned, for we have such a great variety of industries, but as to producing pig iron and steel in any way but specialties, I believe it must pass out of our hands, just as we have given up rail-making in this portion of Great Britain."

D. ALLEN WILLEY.

STEEL BILLETS AT \$35.

Remarkable Sale for 1900 Made at Birmingham.

[Special Cor. Manufacturers' Record.] Birmingham, Ala., September 11.

In strength the market grows in iron. The demand has been fine, and though prices have advanced it has not decreased. The fact is that whenever prices are marked up a raft of orders come in "just concluded when your favor received advancing prices." And then the trouble commenced, for time had to be called on many of these orders. So many circumstances enter into orders accepted and orders declined that explanations would alone usurp the space allotted for general information. Suffice it to say that orders have been in excess of sellers' desires, and the demand seems keener than when iron was dollars lower. One thing that invites attention is the fact that the demand for last half of 1900 is increasing. And this is a reminder of the warning already sounded, that the first half is so closely sold up on certain grades that it is like tossing up a half-dollar for heads and tails as to getting orders filled. The quotations now given as approximately correct are for gray forge \$15; No. 3 foundry, \$16; No. 2 foundry, \$17; No. 1 foundry, \$18; silver gray, \$19, with sales at quotations. For small lots sales have been made at twenty-five to fifty cents above current figures. One sale was made of 2400 tons, half each No. 3 foundry and No. 2 foundry, delivery 100 tons each per month commencing January, at \$16 and \$17. At the same time for prompt and nearby deliveries price is twenty-five to fifty cents per ton advance.

There seems to be a keen demand for basic iron, which hugs the price of No. 2 foundry. The price is tempting, and it looks as if chances are taken on acceptance of orders for that grade. Silver gray has sold at \$19. Another advance is under advisement at this writing in the hope of checking business.

The Tennessee Company has now orders registered for considerable over 500,000 tons. Its maximum capacity (everything going smoothly) is 75,000 tons monthly. But for practical purposes and calculations 65,000 tons is more to be depended upon. Buyers can themselves calculate the chances of an over or an under supply of product. The condition of the market is such as has never before prevailed. There is, therefore, no precedent for guidance in judging the market now. None here will venture a guess as to where the market will go; but it can be repeated that \$20 iron will excite no surprise among the sellers here. The fact is but for the conservative course of the iron-makers here the market would be that now. Contented with a fair profit, they were willing to keep values on that plane, but the buyers came in in platoons and battalions and bid up prices on themselves, and when prices were advanced each time the orders increased, showing plainly what were the necessities of the buyers. And there is no let-up to it as yet. One seller remarked to your correspondent, "we are trying to keep some iron for our small buyers, but have a hard time doing so, for such tempting bids come to us that it is hard to refuse them. The iron industries are certainly in a flourishing condition. In conversation with one who is a prominent official in the Tennessee Company the past week he remarked, "I don't see how our company can avoid returning a balance sheet for the next twelve months showing a profit of \$6,000,000 to \$7,000,000." Just think of it, and then contrast present prospects with the long, dreary years when it was a struggle to keep body and soul together and pay demands that could not be avoided. Export business is "nil," and the transactions in warrants are almost nominal. Some in gray forge were offered at \$14.75 to submit, but no sales are reported. There was made an important sale in steel billets, inasmuch as it fixed the price for 1900. The sale was 8000 tons steel billets at \$35 cash at mill, delivery 1000 tons per month, commencing in January. It has created a sensation.

We are to have a new iron cast pipe works of ample capacity and capital. The articles of incorporation will be signed this week, when the capacity of the plant and the capital of the corporation will be determined. The leading officials of the Tennessee Company are interested in it, and its location will be determined by the inducements offered. But it is certainly fixed, and your correspondent is assured that it has no connection with the one fathered by F. B. Nichols.

The town is all agog with the news of the practical consolidation of the street-railway system of the city. The Birmingham Railway & Electric Co. and the Traction Company have swallowed each other, while the Birmingham Belt Railway, part of it, has separated, to fall a prey to the Seaboard Railroad. The first two retain the name of the Birmingham Railway & Electric Co. and the Traction Company, but each has the same officers and the same management. They thus keep each their separate organization, yet they are owned, controlled and operated by one organization. By doing this they avoid all suits for violation of charter and the rights of the people, etc.

The understanding is that the first thing in order is a call for \$500,000 for better-

ments to put all the lines in first-class condition. The change will be welcomed by the community with cheers, and it indicates that we are growing beyond our breeches and must need the care attendant upon those whose feet are treading upon advanced steps of progress. This deal was reported to you months ago. It has been of slow progress, but has been finally successfully accomplished, and to those only who are behind the scenes it is known that Baltimore parties conceived and pushed the scheme to a successful conclusion. Baltimore money and Baltimore confidence has played a prominent part in the development of affairs in this district in the past two years, and they have so far not yet made a bad investment. They are in on the ground floor.

J. M. K.

Eastern Iron Markets.

[Special Cor. Manufacturers' Record.] Philadelphia, Pa., September 13.

It requires unusual caution just at this time to write on the iron trade. Quotations are advancing and threaten to break away from all control. The reason of this is simply there are so many small consumers who must have material or shut down. Besides that, the larger users of iron and steel are pushing in big orders for next years delivery. In consequence of this rush and the inevitable advance in prices a good many manufacturers are vainly endeavoring to retain a large portion of their capacity in order to profit by the higher prices later on. It is almost needless to say that the pressure for material is too great for any such conservatism.

A great deal of pig iron now being delivered is bringing prices ruling from two to four months ago. The same is true, though in less measure, in regard to finished material. What quotations may be later in the week time only will tell. We are now rubbing close to No. 1 \$25 foundry iron, and there are plenty of buyers who would pay that figure for it if it could be delivered. Steel billets, if they could be delivered, would bring \$45, though \$40 is the supposed quotation. The same is true of sheets, plate iron and steel, structural material and wrought-iron pipe. The manufacturers of all these products have quite recently expressed themselves as to probabilities, and they believe that refined bars will reach \$2.50, plates 3 cents, structural material 3 and sheet iron 4 for No. 28 gauge. Steel rails are likely to move up to at least \$36, though a good many orders are being delivered at \$26 to \$28.

The whole situation is befogged with uncertainties. No clear and concise statement can be given. It is necessary to deal in generalities. Commotion prevails everywhere, and brokers and manufacturers are awaiting record-breaking news from Western or Southern markets.

The Iron and Metal Trades.

[Special Dispatch to Manufacturers' Record.] New York, N. Y., September 14.

In its review of the metal trades the Iron Age says this week:

"The returns from the coke and anthracite furnaces show their capacity entered September at practically the same rate as August, viz., 261,500 tons weekly. While a number of furnaces started in August, the majority were small, and their make was offset by the quite general low rate of production of the stacks active during the whole of the month. We are now, however, entering upon a more favorable season, and a further increase in output is bound to come unless there is some interference with the supply of raw materials.

"The events are bearing out those who predicted that the possession of reserve

plants does not justify the belief in a rapid development of output. Idle furnaces cannot be put into an efficient condition over night, nor can a regular supply of raw materials be secured without vexatious delays.

"The stocks of iron show little change, and there is no evidence as yet of any chance of an accumulation.

"In the pig-iron market we note some buying on the part of the cast-iron-pipe consolidation, which, it is estimated, took about 20,000 tons, including 4000 to 5000 tons of Southern charcoal iron. In Pittsburgh there have been purchases of about 40,000 tons of Bessemer pig for 1900 delivery at \$22.50, valley furnace. Cable reports from England refer to some sales for shipment to this country of Bessemer pig. We understand that this is special iron.

"The steel market is quiet, and nothing is being done in the Central West beyond sales of small lots at fancy prices for prompt delivery. For next year an Eastern mill has sold a round lot at \$35 at mill. Some fair lots of sheet bars and of muck bars have sold in the Pittsburgh market.

"Contracts for structural material continue to come in, in spite of present high prices. On the Delaware the Roach yard has covered the material for a boat, Eastern Pennsylvania mills taking the material. There is a continued run of small orders for buildings for export, sales having been lately made to Mexico, Porto Rico, the Argentine, Trinidad and Hawaii.

"There have been further advances in finished iron and steel. Bars and hoops have risen and plates have come close to the extraordinary price of three cents per pound delivered.

"As yet there are only occasional instances of the withdrawal of orders on account of the great advance in materials, but there is a growing feeling that it must tell. Until now delays in delivery, rather than higher prices, have caused most dissatisfaction.

"The cardinal fact which must be kept in mind, however, is that present orders will carry the great majority of the plants to the close of this year, and very many far into the spring of 1900.

"The report of a shipment of 10,000 tons of copper to this country turns out to be a transfer of Chili bars to one of the works for refining. Not long since Australian copper was reshipped from London to New York, to be refined and returned, simply because it could be done more cheaply here.

"There has been some talk of a further concentration of the zinc-smelting interests of the West. The smelters have been in a poor position between the extravagant ore prices and the unsatisfactory market for the metal. There are some indications of a quiet lowering in the cost of ore."

DEVELOPING ORE LANDS.

Individual and Corporate Undertakings Near Bristol.

[Special Cor. Manufacturers' Record.] Bristol, Tenn., September 11.

The Virginia Iron, Coal & Coke Co. has fifteen miles of its railroad from Elizabethton to Mountain City graded. This is half the distance. Seven miles of steel rails have been laid and the work is being pushed to completion. Fifty carloads of steel rails were received in Bristol last week to be used on this and other portions of the Virginia & Southwestern Railway.

Mr. George L. Carter, president of these two companies, informs your correspondent that Bristol's big blast furnace will be "blown in" the latter part of September, perhaps sooner. The delay from

the 15th inst. is caused by inability to obtain necessary material for repairs. Hands are busily engaged in building the fourth stove, the outer steel walls of which are about finished, the lining with fireproof brick remaining to be done. Large quantities of ore are being received daily from Ducktown, Tenn. (near Chattanooga), Big Stone Gap, Wise county, and Rye Valley, Smyth county, Virginia, the Virginia Iron, Coal & Coke Co. having leased mines at the two latter places, ore from which is brought to Bristol by the Northern & Western and Virginia & Southwestern railways.

Major A. D. Reynolds of Bristol has bought 67,000 acres of timber and mineral land in Mitchell county, North Carolina. The price paid is not revealed. The purchase was made from the Roan Mountain Steel & Iron Co. This land is rich in magnetic and specular iron ore, and also contains vast forests of valuable lumber, such as oak, cherry, ash, poplar and other growths of timber.

Upon this body of land fifteen years ago Gen. J. F. Wilder (formerly of Chattanooga, but now pension commissioner at Knoxville) operated a charcoal furnace and made pig iron, which he shipped to England and had made into razors, with one of which he still shaves himself. This shows the wonderful adaptability of this ore for toolmaking steel.

In a former letter it was stated that a quarter-million dollars would be expended in Bristol this year in building business and residence properties. It is safe to state that that amount will be doubled, as very many buildings not then known of are being erected. L. D.

TEXAS WILL KEEP STEP.

Mr. T. W. House, of Houston, on the State's Prospects.

[Special Cor. Manufacturers' Record.]
Houston, Texas, September 11.

Mr. T. W. House, the leading financier of this city, has just returned from an extended trip through the East, with headquarters at New York.

Mr. House is a banker, railroad president, manufacturer and planter, and the opinion of no other man in this State has greater weight than his. To your correspondent Mr. House said: "I have had a most enjoyable visit in the East, for it is always delightful to be surrounded on every hand by prosperity, and it is a fact that there never was greater prosperity in the entire Eastern portion of the United States, and I mean from St. Louis east by that remark, than there is at present. Railroad earnings are greater than ever before, and the travel is only measured by the capacity of the roads. To illustrate, I tried the Lake Shore, New York Central and Pennsylvania Central for a lower berth to St. Louis, and could not be accommodated unless I waited four days. In coming home I wanted to come by way of St. Louis, but had to take an upper berth to Chicago. I asked the agents of the roads why it was that they did not furnish better accommodations, and they replied that they were pulling all the coaches they could and make their schedule. I find that there is a prevalent idea here that the prosperity in the East is limited to the iron industry, but this is not true. We are sending shoes, agricultural implements, engines, textile fabrics and many other manufactured articles to the old countries of Europe, to the South American republics, to Cuba, Porto Rico and elsewhere. It seems that the demand is greater than the supply in all directions. Everybody is busy, and, as I said before, this made my trip especially enjoyable."

Asked relative to political conditions in

the East, Mr. House replied: "I am not a politician, and I was not looking after politics; in fact, I never heard politics mentioned except in a joking way during my entire trip in the East."

"What will be the result," inquired your correspondent, "of present conditions in Texas?" "Well," replied Mr. House, "I do not like to speculate. My opinion under such circumstances is no more reliable than that of any other man, but, of course, Texas must of necessity get a great deal of benefit through the good conditions which now prevail all through the East. Times were good in this State long after they had been very stringent in the East, and it may be that the good times they are now enjoying will come to us and remain quite awhile after they are through in the East, at least, we hope so. No section of the civilized world can present greater inducements for investment than Texas. There is a disposition to build considerable new railroad in this State; lumber is attracting especial attention; there is some inquiry relative to rice and tobacco. Texas is certainly not forgotten and will be keeping step to the balance of the Union. They told me in New York that the Old South seemed destined to become one of the most important manufacturing centers of the country, and this means that we will soon be in the swim."

A strong effort will be made to bring to Houston next spring President McKinley as the guest of the Transmississippi Commercial Congress, which will meet here from April 17 to 21. At the last meeting of the congress, at Wichita, Mr. Tom Richardson, secretary of the Houston Business League, was made secretary of the congress, and he may be depended upon to leave nothing undone to make the meeting the most important of its kind ever held in that section.

English View of American Prosperity.

[London Statist.]

Since the defeat of Mr. Bryan in November, 1896, put an end to the panic that had prevailed for some months of that year circumstances have combined in a wonderful way to favor the United States. Firstly, there was in 1896 a very abundant wheat harvest in that country, while the crops failed in Australia and Argentina. Drought occurred likewise in India, bringing famine in its wake; and the wheat harvests all over Europe were short. Therefore there was an extraordinary demand for the American supply. Prices bounded up in an unexpected manner, and the American farmers were so much enriched that they were able almost immediately to pay off a large part of the indebtedness which for some years before had been weighing them down. Secondly, the marvelous activity of trade all over Europe made it impossible for European manufacturers to compete in the required time orders which were freely offered to them. As a result, British, colonial and Indian railroad companies have been compelled to seek in the United States the rolling stock and locomotives which they could not buy here at home in the time that they deemed necessary. Thus an extraordinary impetus was given to the iron and steel trades in the United States, and that in turn stimulated all the ancillary trades. Lastly, the suicidal folly of Spain gave an opportunity for the army and the navy to distinguish themselves, and to add a colonial empire to the possessions of the great republic. It looks as if the favoring circumstances were to continue, and the prosperity, which is so great already, would be heightened still more in the next twelve months.

Are Trusts Necessary Under Existing Conditions?*

By John Donnan.

Never in this country's history has there been such a tendency towards consolidation. Never in the world's history have such aggregations of capital been employed. Not only we, in our own lines, see springing into life such gigantic corporations as the American Steel & Wire Co. and the Republic Steel & Iron Co., but when we look around and perceive the existence of such enormous trusts as the Standard Oil Co. and the American Tobacco Co., the latter so powerful as recently to have absorbed a firm of such great wealth as Liggett & Myers of St. Louis (whose annual output of tobacco was not less than 40,000,000 pounds), does it not strike you that the time has arrived for thoughtful men to stop and ask themselves the question: Where do we stand, and whither are we tending? To ask is not to answer a question; nor have I the temerity to think for an instant that I possess the ability to do so. It is a subject as deep and broad as the blue Atlantic, which rolls before us; one so profound and complex that the deepest thinkers fear to penetrate its intricate mazes. Says an eminent writer: "There is nothing more salutary to active men than occasional intervals of repose when we look within and examine, almost insensibly, what we have done, what we are capable of doing. It is settling, as it were, a debtor and creditor account with the past before we plunge into new speculations."

Gentlemen, do you not think that the new conditions which confront us, the bare facts as they exist, have brought us to a point where it is absolutely necessary for us, both manufacturer and jobber, to take our bearings? To get, as it were, our latitude and longitude, and, if possible, try to see if we can find some reasons for existing conditions, for reasons there certainly must be. I think as a basis for our argument we may safely state, as a fundamental principle, that no effect was ever produced without a cause, and grave reasons must surely have existed which compelled large corporations, whose interests heretofore have been antagonistic, to join hands.

I do not propose dealing with the motive which may have actuated individual firms in going into trusts, whether from mercenary reasons or from compulsion, but rather, if possible, to analyze some of the existing conditions which made their formation almost a necessity to the manufacturer for self-preservation. If both jobber and manufacturer will only let their minds revert to the past for a period of twenty-five years we can easily recall a few of the many lines which were imported, such as table cutlery, files, screws, curry combs, padlocks, hand saws, trace chains and many others. Why were they imported? For the simple reason that they could be brought into this country, plus duty, at a lower figure than they could be manufactured here. But why were they not manufactured here? Could we not at that time compete with Great Britain and other foreign markets? No, and for many good reasons. Not only were our industries comparatively in their infancy, but our country was only partially developed. The Pacific coast was then further from us of the Atlantic seaboard than the Philippines are today. No great trans-continental lines connected the Pacific with the Atlantic. The great Northwest was an almost unknown wilderness, and the

*From a paper read before the Southern Hardware Jobbers' Association.

cities of that vast section were but villages. Coming closer home, we find that even we of the East were in the infancy of development. Few railroad systems were in existence. The Chesapeake & Ohio was an incomplete line. The Georgia Pacific unthought of, and the majority of the roads which today form the vast railroad systems of this country were then short, independent lines.

The vast coal and limestone deposits of West Virginia were almost untouched, and Birmingham, which today dictates the price of iron to the world, not in existence. Our few manufacturing establishments were scattered from Virginia to the New England States, and the whole South devoted to agriculture. The infant factories then existing, having to pay high prices for raw material at the mines, and high freight rates to each independent railroad line for the transportation of the raw material to their works, were in no position to keep out foreign goods entirely, even though protected by a higher tariff. But although unable to eliminate foreign competition altogether, still they made handsome profits on their output, for notwithstanding the high cost of raw material, machinery not having reached the high state of perfection it has today, our manufactories had not then reached a point where production exceeded consumption.

But we have been looking at conditions as they existed in the past. Now let us examine the facts which confront us today and see if we can find some of the reasons why the great manufacturing interests of this country have been forced into combinations. Within the past two decades marvelous changes have taken place in our development, no country on this globe having made such wonderful strides. Every section—North, South, East and West—has been brought into instant communication by telephone and telegraph. Four great trunk lines connecting the Atlantic and Pacific and vast railroad systems intersecting the whole interior annihilate distance and pour the wealth of one section at the doors of the other. The rapid development of our inexhaustible mineral resources, the discovery of electricity and natural gas, the perfection to which machinery has been brought, are all new factors, and the manufacturers of today themselves confronting entirely new conditions. Instead of the few factories of New England and the Middle States, which formerly supplied the country with its requirements, monopolizing the trade, we find both the South and West, once wholly devoted to agriculture, entering the fields as active competitors. Where formerly raw material had to be transported hundreds of miles, manufactured and then re-shipped to various sections of the country, we today find our factories not only established at or near points at which the raw material is produced, but where coal or natural gas is found in abundance. Here, then, we find two factors, increased competition and cheaper raw material, causing the commencement of the downward tendency, and as each year has passed, and we have seen perfected machinery, manipulated by skilled labor, producing commodities in quantities far in excess of consumption, declines have come still faster as competition has become keener.

I do not propose to begin an argument as to whether protection does or does not protect, or if it was protection which enabled the manufacturing interests of this country to reach the enormous proportions to which they have attained, but, as

far as I can, to look at facts as they exist, for the reasons which have driven our manufacturing interests into combines. Certainly two indisputable facts stare us in the face—one, that our heretofore infant industries have grown to be giant corporations; the other, that perfected machinery makes our output far in excess of home consumption. These conditions had existed for some time past, and each year, as competition had grown sharper, manufacturers, in their efforts to unload their surplus, cut each other, until the time came when it was nothing unusual to purchase goods far below cost of production; dividends became a rarity, and many holding stock in our most valuable plants would gladly have disposed of it at half cost. Factories were run on half-time to curtail production, and wages were cut to reduce cost of manufacture; the tariff did not protect; for, while protected against foreign markets, nothing protected the giant corporations of this country from cutting each other, and finally competition reached such a pass that had the tariff been eliminated altogether no foreign markets could have placed their goods in this country. Such a state of things could not last; it eventually meant bankruptcy to the individual corporation and ruin to the country at large. Something must be done. If, on the other hand, production was curtailed, it meant loss in wages to the labor employed, as well as loss of interest on capital invested; on the other, if factories were run to their full capacity, it was necessary that prices be advanced in order to make a living profit. Never were the manufacturers of any country confronted with harder problems. Thousands of laborers employed and millions of invested capital attested the fact that this country had progressed too far to think of curtailing production; consequently, the only solution must be to devise some scheme by which to market the output, and do so on a profitable basis, and in the formation of combinations the keen, wide-awake American manufacturer rose to the occasion.

Well do we know that the names trusts and combinations are abhorred by the American people at large. Every means has been employed to prevent their formation; the finest legal talent has been brought into requisition in the endeavor to stamp them out, and yet, gentlemen, viewed from a broad standpoint, which of us will say that, under the conditions which existed, their formation was not necessary? Has the intellect of this country, as yet, been able to devise any other plan by which our manufactured products could be marketed at home upon a profitable basis? I think not. Whether the future will develop any other plan remains to be seen. For the present, at least, we face the fact, that these great combines exist, and are powers in our country, and the question of the most vital importance to the jobber is: Are they detrimental to his interests? I think the jobbing trade can safely say No. For the past twenty-five years there have been no greater sufferers from the awful declines which have taken place than the jobbers themselves, and I think I can unhesitatingly state as a fact that we have sustained greater losses from declines in values than from bad debts. That being the case, then who should more readily welcome any plan devised to raise values than the jobber? But what position have trusts assumed toward the jobber? To the present time, at least, they have regarded him as the legitimate channel through which to market their products, well knowing that, through him, they are reaching the consumer in the most economical way. Yet, no matter what their motive, still we must confess that, thus

far, they have displayed the liberal spirit, and our margins on such lines as nails, wire, shovels and ammunition are most satisfactory.

What of their position towards us in the future? Have we cause for apprehension? I think not. True, trusts are corporations possessing vast wealth, and while, doubtless, it would afford many of the officials infinite pleasure to pay their stockholders even larger dividends than they do, at present, yet the executives of these mammoth interests are keen, far-seeing, business men, and clearly perceive the point beyond which they dare not advance values, and that point is foreign competition. In the foreign competition they recognize their great balance-wheel, which, if it could speak, would say, "I am greater than thou." Therefore, no matter how great their capital, trusts will never possess the power to raise values to a point higher than the tariff protects, and were this government today to open its door and put our country on a free-trade basis, all the trusts of America combined could not raise values to a point beyond foreign competition. And not until the day dawns when trusts shall own this round globe do I see any reason for apprehension, or any cause for feeling that trusts are detrimental to our interests.

But, gentlemen, does it not strike a thinking man that, in the tendency of the times, there is a deep undertone, an almost audible voice, which would say to us, that ours is a land of destiny? Have all the lessons of the past no hidden meaning? Do we not, in the trend of events, discern the guiding hand of a Higher Power than man's? Has it been an accident that the hidden mineral resources of this great land have lain undeveloped until within the past two decades? Is it an accident that this is the only land on the round globe which, within itself, possesses every resource of manufacture and agriculture, and that can give a needing world of its plenty and still have abundance at home? Is it an accident that adversity and keen competition at home have developed the inventive genius of our people until, with perfected machinery and cheap raw material, we are able not only to compete with, but to undersell the world? Is it an accident that just when we have reached the point in our country's history where the output of our manufacturing establishments is so great as to congest the home markets, and wealth, cheap raw material and the most improved machinery have given us the ability to compete with the world, at a profit, without reducing the price of labor at home, at Cuba, Porto Rico, Hawaii and the Philippines should have come into our possession? No, gentlemen; to thinking men these are not accidents. They are providences, which say to us plainly, this country is one of destiny, and has reached the turning-point in its history. We must either retrograde or progress. Which shall it be? The days of our infancy have passed; the period necessary to protect our infant industries is ended. We, today, stand as giants, equipped and ready to battle for the world's commerce. To live within ourselves, to let overproduction and home competition again bring prices to a point from which even combines shall be unable to raise them, is to retrograde and bring ruin and disaster upon our fair land. To open our doors to the world, thereby removing the last vestige of reason for foreign prejudice; to throw down the gauntlet to foreign competition; to seek and find, in export, our relief from a congested market, is to progress; for we well know that foreign labor can never compete with our skilled work-

men, perfected machinery, inexhaustible resources and the greatest wealth the world has ever seen. And, further, overproduction and keen competition have made trusts necessary, in order to raise values to a living profit. Then is not the conclusion equally logical that if, by export, we can relieve congestion, and do away with the necessity for such sharp competition at home, we thereby eliminate from the situation the necessity of combines?

But will the world take our goods? The trade balances for months have been in our favor. Can we export our goods profitably, and in competition with the world? Ask the manufacturers. There are many here today who could say, and truthfully, that had they during the past five years been able to bring their domestic to the profitable mark of their export price, they would have been perfectly satisfied with the profits earned, and the necessity for becoming members of combines would never have arisen.

And now, gentlemen, in view of these indisputable facts, does there remain in your minds a doubt as to the course you should pursue? Does not necessity for relief from congestion at home drive you onward? Does not commerce, the world's great civilizer, draw you onward? Do not the ships of every nation moored to our wharves, in readiness to transport our products to the four quarters of the globe, say, onward? Do not the isles of the sea and the dark places of the earth beckon you onward? And shall such calls go unheeded? Shall such opportunities be slighted? No, gentlemen; a thousand times No; but rather let us give abundantly as we have received, and not only will we be a prosperous and happy nation at home, but, ere long, nations, now semi-barbarous, enlightened by the benign influences of Christian civilization, will arise and call us blessed!

BANKS AND THE PEOPLE.

The Influences Behind the Country's Progress.

In his address before the American Bankers' Association, showing the relations of banks to the progress of the people, Col. Myron T. Herrick of Cleveland, O., said that it was a great mass of merchants, manufacturers, laborers and others seeking to save from daily earnings who made the progress of the country possible. He said:

"It is this army that owns in the United States \$5,696,252,836 of deposits, \$991,591,683 of capital and \$740,336,702 of surplus and undivided profits. It is an aggregation of 5,385,746 of this army which owns \$2,065,631,298 of deposits in all the savings banks in the country, having \$187,475,971 in surplus and undivided profits, and of these 4,835,138 were depositors in mutual or non-stock savings banks, representing \$1,824,936,410 of deposits. The average amount of each savings account is reported as \$383.54, an average increase for the current year for each depositor of \$10.66, and the amount per capita of such deposits is given as \$27.67, a per capita increase for the fiscal year of 1898, as for the entire population, of \$1.11, represented in the savings of the five millions and odd savings bank depositors. And this increase of \$126,255,263 savings bank deposits for the fiscal year 1898, the accumulated savings of these five millions of savings bank depositors, was available to all our 75,000,000 people.

"It is this army which buys the bonds, which builds our schoolhouses, bridges and asylums; our courthouses, jails and water works; which paves our streets, builds our roads and railways, and finan-

ces all our industrial enterprises, and which has practically converted this nation from a debtor to a creditor nation. These are the real plutocrats of America whom the doors of bank vaults hide from the lurid vision of the agitator, and these are the doors which he would batter down. The existence of class in America is in fancy only. Every American has an equal opportunity, and may rise or sink as he may see fit to use the opportunities at hand. He may be of the class that earns or wastes. Our family ties run clear to the bottom, measured by worldly prosperity. Between the mechanic and the millionaire there is no distinctive title save that which nature and good fortune have conferred. We in America, observing the lines upon which older civilization has progressed, and which with mental work and mental influences has created civil society and material wealth, which has raised the people from savagery, may well hope to extend our civilization in the Western Hemisphere—even to the 'Land of the Banana!'"

GENERAL NOTES.

Brief Mention of Various Matters of Current Interest.

The Chamber of Commerce of Columbia, Tenn., has already 100 members.

The Ohio River Improvement Association will meet at Louisville, Ky., October 18 and 19.

Five hundred men are employed at the Union copper mines at Gold Hill, Rowan county, North Carolina.

The production of coal in Maryland has increased from 2,476,075 tons in 1883 to 4,674,884 tons in 1898.

During the past year the taxable wealth of Houston, Texas, has been increased by \$2,989,366.

Sumter, S. C., has voted almost unanimously in favor of exempting factories from taxation for five years.

A new long-distance telephone system, to cover all important points in the Mississippi valley, is contemplated.

Hayward & Co., grain exporters of Kansas City, will have a branch at Galveston during the coming year.

The construction of three torpedo-boats and two destroyers is well under way at the works of the Trigg Shipbuilding Co. at Richmond, Va.

Several hundred men are pushing near Tallahassee Falls, Ala., the work upon the electric-light and power plant to supply Montgomery, Ala.

The conference called by the Civic Federation of Chicago, Ill., to discuss the question of "trusts and combinations" is in session this week at Chicago.

A convention will be held at Savannah, Ga., in November, under the auspices of the Board of Trade, of which Mr. G. D. Purse is president, to discuss sugar-cane-growing in Georgia, with special reference to the most improved methods of growing the cane and granulating the product.

Fire Clay Property Wanted.

The Manufacturers' Record has an inquiry for a deposit of flint fire clay, suitable for manufacturing high-grade fire bricks. We should be glad to have parties who control, or know of, such a property as this write us fully regarding the extent of the deposit, its character, shipping facilities, etc., when the communications will be referred to the inquirer.

RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

FACTS OF RAILROADS.

Record of Progress During the Past Year.

Advance sheets of the introduction to the thirty-second number of Poor's Manual of Railroads present a comprehensive, satisfactory exhibit of American railways. According to it, the length of steam railways in the United States on December 31 last was 186,810 miles, a net increase during the year of 2219 miles. The largest advance was in the southwestern group of States, where 910 miles were built, Arkansas leading with 224 miles, Texas 180 miles, New Mexico 159, Missouri 132 and Oklahoma 120 miles. The abstract of the introduction says:

"The fact that since 1887 the construction of railroads in this country has shown a declining tendency is frequently mentioned as being evidence that the prosecution of these works has been in excess of the requirements of the country, and that, in consequence, railroad building must be at a standstill, practically, for some years to come or until the country shall have grown up to the capacity of the lines now in existence.

"Such an assumption, if not wholly erroneous, is at least premature. It is less than a quarter of a century since the first transcontinental line was completed in these United States, yet since then no less than four additional transcontinental routes to the Pacific have been pushed to a successful consummation within the borders of our country, not to mention the Canadian Pacific, that stupendous enterprise of our neighbors across the border, and the Atchison's outlet to the Gulf of Mexico through Mexico.

"The fallacy of the assumption that railroad building has been overdone in this country is manifest when one bears in mind the vast sections of comparatively undeveloped land that yet remain to be brought into touch with the markets of the East.

"In respect to the extent of its ramifications the railroad has reached its highest development in Massachusetts, where there is one mile of railroad for each 3.9 square miles of territory. In the whole of New England the railroad mileage is in the ratio of one mile to nine square miles of territory. In the Middle States the ratio is one to 5.3. In the five Lake States the ratio is one to 6.2. In the United States the ratio is one to 16.2. To bring the average of the United States down to 1 to 10 means a total of railroad mileage of 302,560 miles. In the eleven Southern States there are 498,435 square miles. As there are no extraordinary difficulties to be overcome in that section, and as the period of their development has apparently only just begun, it is safe to predict that railroad construction in that section will continue until there shall be at least one mile of road to each ten square miles of territory. That would mean a total length of railroad of nearly 50,000 miles, as against the present total of 36,019, the new mileage required being an addition of nearly 40 per cent. Then between the Mississippi and the Pacific we have an empire of 2,094,435 square miles, having at present 80,946 miles of railroad, or one mile of road for each 25.9 square miles of territory. That this vast territory will one day have railroads in extent equal to one mile of line for each fifteen square miles of land goes without saying. When it does it will embrace a

total of 140,000 miles of road, so that in the two grand divisions of the country now most sparsely supplied with railroads the ordinary development of the country predicates an addition of 73,000 miles to their present totals.

"It is difficult to forecast the movement of the railroad construction in this country, yet it is well-nigh impossible to overestimate the possibilities of the future in that great industry of railroad making. America has given the world some points in this business, both as to the rapidity of our operations and the breadth and boldness of our designs and achievements."

The statistics show 36,746 locomotives, 25,844 passenger cars, 8049 baggage, mail, etc., cars, 1,284,807 freight cars; total liabilities, \$11,968,751,204; total assets, \$12,285,367,702; passengers carried, 514,982,288; tons of freight moved, 912,973,853; total earnings, \$1,249,558,724, and net earnings, \$389,666,474.

NORFOLK & WESTERN.

Healthy Condition of the Company Shown by President Fink.

The annual report of the Norfolk & Western Railway shows that during the past fiscal year the earnings of the road were \$11,827,138, an increase of \$591,016, while the increase in the expenses was but \$53,004. The net earnings were \$3,888,036, an increase of \$538,012. The principal increase in the expenses was upon the maintenance account, while the cost of transportation was diminished in spite of the fact that there was an increase in the number of passengers carried of more than 100,000, and of freight carried of more than 500,000 tons. The rate per passenger per mile increased from 2.197 cents to 2.253 cents, while the rate per ton of freight per mile diminished from .404 to .397 cents. President Henry Fink shows that during the year \$217,287.63 were spent in construction, \$99,450.88 on equipment and \$85,753.98 on improvements and betterments.

In accordance with the policy determined upon a year ago of reducing grades wherever practicable, a low-grade branch line 7.2 miles long near Radford has been authorized. This construction shortens the haul 4.3 miles and reduces the grade from seventy-eight feet per mile east-bound and eighty-six feet per mile west-bound to eleven feet per mile east-bound. The entire cost of this branch is estimated at \$475,000. Property has also been purchased for a passenger and freight station at Durham, N. C.

The bulk of the increase in freight was in bituminous coal, coke, pig iron, iron ore and lumber shipments. Among the improvements in roadbed, etc., have been the relaying of 26.65 miles of main track with 85-pound steel rails and 55.83 miles with 75-pound steel rails, the ballasting of 31.95 miles, the replacing of wooden tressels with masonry and embankments, or with steel structures and masonry, the reduction of grades, the deepening of slips along the coal piers at Lambert point to thirty feet at mean low tide, the erection of a coaling station at Delano and a rail-sawing mill at Roanoke. Considerable increase of traffic is expected from the reopening of the blast furnaces along the line, while the revival of business is reflected in the increase of the company's passenger traffic.

THE ARKANSAS NORTHERN.

Interest of Little Rock in Its Continuation.

In a letter to the Arkansas Gazette, Mr. S. H. Nowlin of Little Rock sets forth twenty reasons why the Arkansas

Northern Railroad should be built to Little Rock. The reasons deal with the benefits, commercial and industrial, to be derived by Little Rock from being brought in touch with the rich mineral, timber and agricultural regions of Northern Arkansas, which he regards as the section of greatest possibilities and possessing the greatest amount of natural wealth in the State.

The railroad, he says, running 200 miles in Arkansas, will open up for settlement millions of fine agricultural lands adapted to the growth of a great diversification of products at altitudes above tidewater ranging from 300 to 2000 feet, including rich valleys, fertile hills, table lands and mountain tops, responding promptly to the labor of the farmer and the orchardist. There are also great timber regions embracing all the commercial timbers known to Arkansas, especially hardwood varieties of superior size and quality. Great water-powers abound, at one point in Marion county it being estimated that a minimum of 25,000 horse-power may be made available by the expenditure of that many dollars. Zinc, marble, limestone and coal are to be found in abundance. Mr. Nowlin says that when the Arkansas Northern Railroad is built the territory essential for the material growth of Little Rock will have been practically compassed, and the day of canvassing for railroad bonuses will have passed. Little Rock will be the converging point for four great lines of railways, and will have a system of railroads and water transportation that will make the city the capital of Arkansas in fact as well as in name.

Giant Industry in Steel-Car Making.

The magnitude of the business of manufacturing steel cars by the Pressed Steel Car Co. of Pittsburg is illustrated in a statement published last week in a Pittsburg paper to the effect that this company will soon be the largest single steel consumer in the country. It is even now receiving 1100 tons of steel a day from the Carnegie Company, and yet its car-building operations are hampered by the lack of material. The coal cars which are being made have a capacity of about 100,000 pounds, and the Lake Shore & Michigan Southern Railroad Co., which has been making some tests of speed in unloading coal from the self-clearing hopper steel cars to the steamers on the Great Lakes, lately gave the result of the tests to the Pressed Steel Car Co., stating that it had been able to continuously unload 110,000 pounds of coal from the cars to the boats in three minutes.

With the rapid growth of this industry and the demand from foreign countries for steel cars, the company has decided to build a branch establishment in Europe. The exact location of the plant has not yet been made public, but it will be somewhere in Russian territory, and the great Russian line of railway will, it is stated, be equipped with steel cars built on the American model. Its capacity will not be less than twenty cars a day at the start. The growth of such an industry as this ought to insure a stability to it as an investment equal to the very highest class of industrial enterprises, and it is in such gigantic works as these, the outgrowth of small establishments at the start, wherein we see the power and wealth of Pennsylvania's iron interests. When we contrast what Pennsylvania has accomplished with the progress made in the South, we can see that our section has as yet hardly got a real good start.

All honor to Pennsylvania and her great industrial leaders, her Carnegies, her Westinghouses, her Schoens and her hundreds of others whose brains and en-

ergy have created employment for hundreds of thousands and made millions of wealth; but what they have done the South must do. We have greater advantages, and it remains for us to demonstrate the power of our brains and our energy.

For Columbus' Benefit.

The 18-mile extension of the Central Railroad of Georgia from Searight to Andalusia, Ala., is approaching completion. It is expected to open up to Columbus one of the best sections of Alabama, where already a good many enterprises in the way of new saw mills are projected. Columbus is also interested in the completion of the Chattahoochee Valley Railroad from West Point to Columbus. The road has already been constructed as far as Riverview, Ala., and thus it is proposed to extend it on the Alabama side of the Chattahoochee river to Phipp's island, about seventeen miles northwest of Columbus, where it will cross into Georgia and be built at once to within twelve miles of Columbus. A dispatch from that city states that in addition to opening to manufacturing enterprises the Chattahoochee river between Columbus and West Point, it is planned to extend the road north from West Point to Carrollton, connecting there with the Chattahoochee, Rome & Southern Railroad, thus giving Columbus another northern and western outlet, and shortening the mileage of Chattanooga.

Pushing Construction.

An inspection trip just completed by Mr. R. B. Seymour, chief engineer of the Richmond, Petersburg & Carolina Railroad, between Richmond, Va., and Ridgeway, N. C., shows that work is progressing satisfactorily. The material has been delivered at Ridgeway for the steel bridge across the Roanoke river, 612 feet long, and track has been laid for about ten miles between the river and Lacross, with the exception of about a mile, where heavy work is necessary. Track has been laid also for five miles north of Lacross, between which and the end of the twenty miles already in operation from Petersburg south the work of grading is being pushed. Foundations for the bridges across Maherrin and Nottoway rivers have been laid, the masonry for the Appomattox bridge is about half completed, and the foundations for the bridge across James river are being laid. About five miles of grading has been done between Petersburg and Richmond.

New Line Proposed.

At the meeting last week of the directors of the Central Railroad Co. of West Virginia, George C. Sturgiss of Morgantown was elected president, and R. T. Defries of Wheeling, general manager. A dispatch from Grafton states that plans were discussed for the early grading of the road, the right of way having been completed as far as Bellington in Barbour county. The road from Morgantown will cross the Baltimore & Ohio tracks not far from Hardman switch, and again at Thornton, six miles east of Grafton. Arrangements, it is said, will be made with the Baltimore & Ohio, by which the new road will enter Grafton over its line from Thornton.

Atlanta's Belt Road.

Grade crossings and other difficulties of railroads in Atlanta are to be diminished, if the plans for a belt railroad there are carried through. A company including Henry B. Tompkins, Walter B. Harrison, G. W. McCarthy, J. W. Pope, S. T. Weyman, W. M. Kelly, H. L. Mc-

Kee, Clark Howell, Joseph Thompson and Robert C. Alston has applied for a charter of the Atlanta Belt Railway. The road, about thirty miles in length, is to touch at various points the railroads entering Atlanta, so as to permit the transfer of freight cars around the city, instead of through its business portions. The road will begin near Howell Station, on the Western & Atlantic Railroad, and extend to Clifton, on the Georgia Railroad, and thence to the point of beginning. It will be capitalized at \$500,000, and the petitioners state that they propose to construct it without delay.

Memphis Interested.

The completion of the St. Francis levee, which protects from overflow the Decker, Osceola & Northern Railroad, running from Deckerville, Ark., to Osceola and Luxora, makes it an important adjunct to the railway service of Memphis. The Commercial-Appeal enumerates the advantages of the section of East Arkansas traversed by the road, its cotton farms and its timber forests. Already there are sixteen saw mills on the line of the railway, which cut about 100,000,000 feet of timber annually. The railway has been constructed by the Pond-Decker Lumber Co., which, according to the Commercial-Appeal, proposes to continue its construction up the river to Cairo. New plats for the towns of Osceola and Luxora are being made on the west side of the levee adjacent to the railway, so as to be protected from overflow, and new buildings are being erected.

For a Continuous Line.

According to a dispatch from Little Rock, the Searcy & Des Arc Railroad Co. is to be formed by a consolidation of the Des Arc & Northern Railroad Co., which now runs from Higginson to Des Arc, and the Searcy & West Point Railroad Co., which now runs from Searcy to West Point, and the purpose is to have a continuous line of railway from Searcy to Des Arc, crossing the line of the Iron Mountain route at a point between Higginson and Kensett, to be determined by a survey.

Seaboard at Augusta.

The Harrison block of land opposite the union depot at Augusta, Ga., has been purchased for something more than \$100,000. A dispatch from Augusta quotes President Williams of the Seaboard Air Line to the effect that the property was purchased by parties friendly to that company for the purpose of turning the property over to it in the event of its building to Augusta.

Grew from a Feeder.

The Louisiana & Arkansas Railroad, originally a feeder for saw mills at Stamps, Ark., has been completed for a distance of eighty miles through Arkansas and Louisiana to Minden, in the latter State, and, it is reported, will be continued to Natchez, Miss., as its final terminus.

Railroad Notes.

The South Potomac Railroad Co. is expected to organize this week at Romney, W. Va.

The Tennessee Central Railway is practically completed between Monterey and Emory Gap.

Regular train service has begun on the Mobile & Bayshore Railroad between Mobile and Portersville.

The Georgia & Alabama Railroad is building 1500 new freight cars at the company's shops at Americus, Ga.

Work has begun on the street railroad

which will run from the center of Macon to Melrose Heights, or North Macon.

The Choctaw & Memphis Railroad Co. has purchased for \$21,000 a building at Little Rock, which will be used for general offices.

Mr. C. M. St. Clair has been appointed master mechanic of the Chattanooga Southern Railroad, vice H. T. Ellison, resigned.

The net earnings of the Western Railway of Alabama during the past fiscal year were \$261,686.17, an increase of \$47,241.56.

The Black Diamond Railroad has secured an amendment to its charter in South Carolina, extending the charter to sixty years.

Employees of the Birmingham Railway & Electric Co. will hereafter be given prizes for keeping the cars clean, and for avoiding accidents.

The propositions of two companies for street-railway franchises in Richmond, Va., will be heard by the council committee on streets today.

Increase of business of the Southern Railway Co. at Winston-Salem, N. C., necessitated the adding of clerks to the force already at work there.

President J. Skelton Williams is quoted as stating that solid trains will be run from New York to Tampa by way of Columbus and Savannah by January 1 next.

Mr. Peter Burke has been appointed soliciting freight agent of the Mobile & Ohio Railroad Co., in the island of Cuba, under the jurisdiction of the general traffic department.

The property of the Galveston (Texas) City Railroad Co. has been sold by order of the court to John Runge and others, representing the stockholders of the company, for \$905,000.

It is announced that the Baltimore & Ohio Railroad expects to add 6360 cars to its present supply of 45,000. Of the new ones, 1200 are being built by the South Baltimore Car Works.

It has been officially announced that the half lease of the Georgia Railroad secured for the Louisville & Nashville by the Atlantic Coast Line was not made in the interest of any other line.

The Big Four system has, according to a dispatch from Louisville, Ky., bought for \$20,000 property 102x237 feet, which it is understood will be used as an extension of the company's yards.

The rebuilding of the Georgia portion of the Atlanta, Knoxville & Northern Railway has been completed and workmen are now engaged reducing grades and ballasting the portion in Tennessee.

Thirty-three new locomotives have been ordered by the Baltimore & Ohio Railroad from the Baldwin Locomotive Works, to be delivered in December and January. The weight of each engine is to be 176,000 pounds.

Work has begun upon the construction of a three-mile spur from Starkey's, on the Norfolk & Western Railroad, to the iron-ore mines in the Red Hill section of Roanoke county, Virginia, to supply with ore a furnace at Roanoke.

It is reported at Jacksonville, Fla., that the Pablo Railway, which has been purchased by Mr. Henry M. Flagler, will be converted into an electric road, and that improvements at Pablo will make it one of the finest resorts on the Atlantic coast.

S. F. Ferguson of Huttonsville, W. Va., is endeavoring to secure 1000 laborers to work on the construction of the Greenbrier River Railroad, which it is expected will ultimately connect the West Virginia Central Railway and the Chesapeake & Ohio.

The Virginia Conduit Railway Co., interested in an underground trolley system, has been organized at Richmond, Va., with Henry W. Rountree, president; W. B. Davie, secretary and treasurer, and A. Pizzini, Jr., general manager, temporary officers.

Opinion prevails in Eastern Carolina that the construction of the proposed railroad from Wilmington to Southport will do much to make the latter an important coaling station for steamships and result in the opening up of the coal fields of North Carolina.

Mr. Edwin Wood, promoter of the Tennessee & Western Railroad, to be built from Memphis to Knoxville, has been in Memphis with a view to planning for an extension of the Choctaw system by way of his line from Memphis to the coal fields and phosphate beds of East Tennessee.

The Atlantic, Valdosta & Western Railroad's petition to the Florida railroad commissioners that it be allowed passenger facilities in the Jacksonville station of the terminal company has been granted. The road is ordered to pay \$1275 a month for the privilege of adding to its proportion of the expenses of the terminal property.

The people of Selma, Ala., are expecting much from the completion by the Louisville & Nashville of the construction of the line forty miles between Repton and Pineapple, inasmuch as the city will have direct connection with Pensacola. All the grading of the connection is completed and the tunnel 800 feet long below Pineapple is nearly completed.

The directors of the Frederick, Thurmont & Northern Electric Railway Co. have elected Col. L. Victor Baughman president; Col. D. C. Winebrenner and Alexander Ramsburg, vice-presidents; Charles C. Waters, secretary, and Dr. F. B. Smith, treasurer. Franchises for the use of streets have been granted to the company by the towns of Thurmont and Emmitsburg.

The expert selected to investigate the route of a proposed railroad from Denison, Texas, to Salina, Kansas, projected by the Kansas, Oklahoma Central & Texas Railroad Co., has, according to a dispatch from Salina, made a favorable report. The line, with its branches, will be 650 miles long, and is to run from Salina to New Kiowa, to Oklahoma City, and thence to Denison, Texas.

During the past year the Louisville, Henderson & St. Louis Railroad, operating 186 miles, had a surplus from operations of \$35,885.44. There were 2600 feet of track laid in extending sidings and building new side-tracks. One hundred tons of new 70-pound rails were laid on curves, and many repairs of trestles and roadbed made. About fifteen miles of track on the main line are yet to be ballasted.

According to the statement of the American Car & Foundry Co., with headquarters at St. Louis, orders were received by it during August for more than 6000 railway cars. During the five months, from March to August, 61 passenger cars, 26,269 freight cars, 315,315 wheels, 5600 tons of axles, 29,106 tons of castings, 30,186 pounds of bar iron, 41,054 tons of water-pipe and 424,800 pounds of brass journal bearings were made by it.

It is believed at Pensacola, Fla., that as soon as additional facilities are perfected by the construction of the new wharf, warehouse and railroad tracks, one steamship will be loaded and cleared each day from that port. Large shipments of grain are expected.

COMMERCE.

This department is devoted to a record of the rapidly developing commerce of Southern ports.

WORLD'S CLEARING HOUSE.

Why America Should Take That Position.

At the meeting last week of the American Bankers' Association at Cleveland, Mr. William R. Trigg of Richmond, Va., made an address on the subject "How Can the United States Become the Clearing House of the World?" In it he said:

"The export of our grain, our cotton, our metals, our lumber, and by far the greatest of all, our manufactures, is determining the question of where settlements will be made. The flow of gold that has heretofore gone to England will in the main come to the United States, and here the clearing of the world will be done. We can bring this about, or rather hasten, for we cannot, in my opinion, stop it, in no better way than encouraging the enterprises of our people, not necessarily by governmental aid, but by sympathy, which is most necessary in business. Encouragement, however, we must all admit, is in order when reports shows that this country has fallen from the first place in gold production, which it held for fifty years, up to and including 1896, to the third place. Africa passed us in 1897, and Australia in 1898. This would seem to prove there is progress elsewhere, but after all, what care we where the gold is digged, if its final lodgment is in our own coffers? The day not yet passed, but passing, is at hand, when the American eagle shall be as well known as the English sovereign, and then the pound shall give first place to the dollar—and then, we shall clear for the world.

"We are a greater people today than ever before in our own estimation, and in the estimation of the world, for the world has seen the sections shake hands, not in recanting, but to meet a common foe, and I say to you, gentlemen, the South, which I represent, stands in her prowess and her resources a very bulwark of strength for all that she espouses.

"It is known now that the policies of a party she fought that the great destiny of the nation she will never thwart. This the world sees and admires and will soon entrust 'the balance' with us. In the meantime it should be the endeavor of each member of this association to the full extent of their efforts and influences to see that all foreign business, sales, purchases, exchanges should be made in dollars, not in pounds, invariably in both, and thus familiarize the world with our standard and measures, for it is most important that our weights and quantities should be familiarized. When we quote we should use our methods, and when we buy we should insist that accounts should be stated in the same way, and the desire to sell will educate quickly; when the world knows our method of computing and recognizes us at the same time to be as we will be, the largest exporter and importer, our wish for the clearing house will be realized.

"We should build up by just laws every portion of this country. Cuba, Porto Rico and the Philippines and all that is expected of them, as agencies of greater prosperity to this country, can rest in the shadow of the good that awaits us upon the complete rehabilitation of the South, that will bring our common country greatness. If our foreign conquests vanish (which, by the way, they will never do), and, therefore, this rehabilitation you should strive to bring about from selfish, if not higher motives, for her

coming in full panoply brings the command of the world's trade.

"We need in the South a just currency law, as they do in the West. I ask no law that disregards the first of all mercantile requirements, the gold standard, the sine qua non of international exchanges, the stability of home affairs, but it must, however, be a law that restores the use of credit (but I fear from appearances and information, or rather non-information, it will be long before we get it). Secure this legislation to us, build an Isthmian canal, and the corner-stone of the world's clearing house will be laid, and we will locate it south of the Mason and Dixon line, if you of the wealthier, but not more resourceful section, do not have a care. And the South deserves aid, for she is helping herself, as witness her growth, and will not name the difficulties she has overcome and is overcoming; see what she has done in the last ten years.

"Give us the laws we want and before the closing of the first decade of the coming century, when our population will have reached 100,000,000, there will be none to make us afraid commercially in all this world, as there is none we fear in arms today; and then will not the clearing house be ours, for how can it be helped? The day of settlement is coming when Vienna asks Paris for exchange to pay her debt to us, and finds that Paris, too, is indebted to us, and then applies to Berlin and St. Petersburg and all the great continental capitals, always receiving the same answer, and, finally, too, when it comes from London, and all have to ship us gold, the scepter will have passed into our hands and the clearing house is ours."

WANTED IN SYRIA.

Suggestions for American Manufacturers.

Of late considerable interest in American manufactures of various kinds has become manifest among Beirut merchants. This may be due to the fact that German export houses are drawing the lines tighter on Syrian commission merchants; or it may be attributed to the late war, which brought the United States into prominence even here in the Levant, where it was formerly known only vaguely and where nobody was aware of its industrial and commercial achievements. Articles commenting on our tremendous exports have been translated from French, or, through the co-operation of the consulate, from American papers and published in the local Arabic sheets.

"In this connection," writes United States Consul G. Bie Ravndal at Beirut, "it should be remembered that while previously United States vessels laden with petroleum, furniture, hardware, cotton goods, cordage, lumber and flour have visited this port, no United States ship has been seen in these waters since 1880 excepting men-of-war and pleasure yachts. This new interest in American affairs has also been aided by the growing Syrian exports to the United States, the emigration, the agitation for direct steamship facilities, etc. The present time seems favorable for a move on the part of American manufacturers to meet this sentiment and take advantage of it.

"The merchants here want samples, and will not, except in rare cases, buy from catalogues. Samples should cover, I should say, as far as practicable, flour, iron, petroleum, lumber, mechanics' tools, kitchen utensils, carriage springs, hardware in general (nails, screws, locks, etc.), pumps, windmills and hydraulic rams for irrigation, lamps, clocks, furniture (chairs, desks and iron bedsteads), cotton goods (cheap and showy prints and

heavy cloth for tents, awnings, sails and shoes), canned provisions and prepared cereals, patent medicines, paints, leather and saddlery, paper (print, packing and stationery), shoes and slippers, crockery, bicycles, toys and notions.

"I would recommend that such samples be sent—the sooner the better—to Mr. Fried. Wehner, an old trading and banking house in Beirut, which enjoys an excellent commercial reputation, and the financial standing of which, according to the Imperial Ottoman Bank (Beirut), is very high."

Mobile to New York.

In discussing the prospects of the new steamship line between Mobile and New York, scheduled to begin operations this week, Mr. Alexander Hollander is quoted at New York as follows:

"Our steamers will ply between New York and Mobile, and we shall there meet the Mobile & Ohio with its rail route to St. Louis. The new company will begin active operations in the course of a few days, and it is expected that the first steamer, the Catania, will sail about September 14 or 15, and this will be followed by regular weekly sailings.

"We have leased Pier 31 on the East river. The Catania was an army transport during the Spanish war, and is fitted out for both passenger and freight service, although the new line will be devoted especially to freight. The vessel has a carrying capacity of 3100 tons, and has a speed of about twelve knots an hour. She will sail on her maiden trip for the new line with a full cargo, and she has been chartered for a full cargo of cotton (7000 bales) and some ore on the return voyage.

"The Mobile & Ohio Railroad Co. has entered into a contract with the new company giving the latter the exclusive rights to run a line of steamers between Mobile and this port for a period of five years, with the option of renewal for another five years. An important feature of the new enterprise is that a through tariff arrangement has been perfected for shipments of merchandise direct from New York to St. Louis via Mobile. The Mobile & Ohio is the only large seaboard line without an Eastern connection, and the New York-Mobile Steamship Line is only a natural outcome of the necessity for such an Eastern connection."

Grain to the Gulf.

Discussing the report that the railroads connecting lower Mississippi points with Gulf ports will not advance their rates on grain for export, the St. Louis Republic says: "The Western and Eastern roads have entered into an agreement to make an advance on September 18 of three cents per 100 pounds on all grain for export from Missouri river to Atlantic seaports. The Gulf lines some time ago agreed that their rates would be made four and one-half cents less than any rates fixed to the Atlantic coast. Now the Gulf lines refuse to maintain the differential of four and one-half cents, claiming that they would not be able to secure any export grain traffic if they advanced their rates to eighteen cents per 100 pounds on wheat from Kansas City to New Orleans, for example, and increased the rate on corn to sixteen cents per 100 pounds.

"The Western lines are angry over the refusal of the Gulf roads to advance the export grain rates with them. It is plain that shippers of wheat will not send it from Kansas City to Baltimore when they can save seven and one-half cents per 100 pounds by sending it to Galveston or New Orleans. The roads running east from Chicago, St. Louis and Peoria

now declare that they will not reduce their rates on export grain, and that the Western lines will have to stand the loss of three cents per 100 pounds in order to meet the competition of lines to the Gulf. The Western lines are satisfied that their Eastern connections will be only too willing to join in making reduced rates as soon as it becomes apparent that export grain traffic is moving via the Gulf."

New Southern Connection.

[Special Cor. Manufacturers' Record.] Manchester, England, August 31.

At the annual meeting of the Manchester Liners, Limited, Sir Christopher Furness, chairman, made the announcement that arrangements had been completed to begin a regular service between Manchester and New Orleans. This is the first meeting of the company, which has been formed to develop the commerce of Manchester by the ship canal. It is a wealthy corporation, and its formation means much to the Southern seaports of the United States, as it will engage extensively in the cotton-carrying trade. The company has contracted for a fleet of seven ships, each of which will have a carrying capacity of about 5000 tons. Several are now being constructed, and will be placed in commission as soon as turned out of the shipyards.

Sailed from Port Arthur.

The British steamship St. Oswald, the first to pass the Port Arthur ship canal, went under her own steam with 75,000 bushels of wheat aboard through the canal last week and anchored in twenty-six feet of water in Sabine Pass to receive from lighters the remainder of her cargo, which included 1,332,100 pounds of flour, 322 tons of staves and 300,000 feet of lumber, all consigned to Rotterdam, Holland. It is authoritatively announced that within the next two months there will be twenty-five feet of water the whole length of the canal. The next steamer is due at Port Arthur on September 20 to take cargoes of grain and flour for Liverpool.

Statistics of Commerce.

In the arrangement of the monthly summary of commerce and finance, beginning with the first volume of the fiscal year 1899-1900, Mr. O. P. Austin, chief of the bureau of statistics of the United States Treasury Department, has brought to the opening pages certain information which seems likely to be useful to the producers, manufacturers and exporters of the United States, with the purpose of making them readily accessible to all, while the tables, which are each month consulted by those interested, are transferred to other pages, in the belief that they will be equally accessible to those regularly consulting them after their new location is established.

Jottings at the Ports.

The imports at Newport News, Va., during August amounted to \$151,606.

The Eastern & Southern Trading Co., which will carry on a general importing and exporting business, has been chartered at Norfolk, Va.

Messrs. R. T. Morrison & Co. of Kansas City have leased the Louisville & Nashville elevator at Pensacola, and will reopen it at an early day.

What is said to be the first cargo of cotton shipped on the Atlantic coast this year for a foreign port was made this week from Wilmington on the British steamship South Africa for Bremen, Germany. The cargo was 12,628 bales, weighing 6,384,262 pounds, and valued at \$414,976.

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

LUMBER MARKET REVIEWS.

Baltimore.

Office Manufacturers' Record, Baltimore, Md., September 14.

The volume of trade in local circles has been of an average character during the past week in nearly all lines of the lumber industry of the port. The demand continues steady for certain grades, and prices throughout the list are generally firmer. With regard to white pine this is especially true, as the demand is sharp, with stocks not excessive, and prices generally tending higher. There has been a good inquiry from yardmen, who are replenishing their stocks for future trade. In North Carolina pine all grades are selling well, and stocks continue moderate. Air-dried flooring and box lumber show steadier prices, with more inquiry from the usual sources. Kiln-dried lumber shows some scarcity in certain grades, and sales to out-of-town buyers during the past week have been good. There is more inquiry for the better grades of North Carolina pine from European markets, and considerable business will be developed during the fall and winter months in this line. Hardwoods are all selling well, especially ash, which is in good demand from woodworking concerns, while prices for this wood have advanced sharply. Oak is in light supply and values firm. Poplar is steady, with a well-assorted stock. The foreign inquiry for hardwoods shows the situation unchanged, while the market abroad is very steady, with stocks not large. The London Timber Trade Journal in its issue of September 2 says: "The mahogany and hardwood market remains in the same state as previously reported. Wholesale business passing is very restricted and limited to a few sales by private treaty. Dealers are generally clearing their stocks at current rates, which are firm, with an upward tendency. The reserve dock stock is being gradually cleared out of the sheds, and is now only represented by a few hundred logs in some cases, where it formerly might be reckoned by thousands."

Norfolk.

[From our own Correspondent.] Norfolk, Va., September 14.

The activity in almost every department of trade at this port is at the moment quite pronounced and along the wharves and railway terminals every evidence of the autumn trade is in sight. The lumber industry is still surrounded by the most favorable features and the market continues to show remarkable strength as the season progresses. In North Carolina pine the demand is urgent and shipments both by rail and water continue as large as usual. Lumbermen are engaged in selecting new territory and providing themselves for future operations. Norfolk firms have lately been investing heavily in Eastern North Carolina timber lands and prices are advancing as the demand increases. Throughout the North Carolina pine business all the mills are fully employed and all the orders they can execute. Stocks are not accumulating, as lumber is shipped almost as fast as it comes from the mill. The foreign inquiry is better than usual, but in order to satisfy domestic wants the various companies have been doing less foreign business during the summer months. There is a still further improvement in dressed lumber and planing mills are now very busy on orders. Prices throughout the list for both red

and dressed lumber are firmer, with indications of a further advance in the near future. Freight rates on lumber continue firm and hardening, with a moderate offering of desirable tonnage. Among the charters reported for the week are the following: Schooners Albert Mason, 271 tons, and Edward P. Avery, 482 tons, from Norfolk to New York with lumber at \$2.50; schooners Lucie Wheatly, 180 tons, and Abbie H. Green, 253 tons, Scotland to New York with lumber at \$2.60, and schooner John R. Fell, 319 tons, Scotland to New York with lumber at \$2.65.

Charleston.

[From our own Correspondent.]

Charleston, S. C., September 11.

The movement last week in lumber circles was fairly active, with a decided improvement noted in the general market. The demand is quite active, and both at this and the port of Georgetown shipments of lumber continue to improve. Merchantable lumber is quoted at \$14 to \$16 for city sawed, \$12 to \$14 square and sound, \$9 to \$13 for railroad, \$8 to \$11 for raft; dock timber, \$4.50 to \$6.50; shipping, \$8 to \$10.50. There is a good demand for shingles at \$4 to \$7 per thousand. The shipments during the week were as follows: Steamship Cherokee for Boston with 28,789 feet of lumber, and the following shipments to New York: Schooner George B. Congdon, 326,088 feet of lumber; brig John McDermott, 427,000 feet, and steamship Comanche, 70,590 feet. There is a moderate offering of handy-sized vessels and rates continue steady, with lumber to New York at \$5.75, New Haven \$5.75 to \$6. A charter was closed last week of schooner, 389 tons, Charleston to New York, six trips, with lumber, at \$5.87½; schooner Mary B. Judge, 400 tons, from Charleston to Norwich, with lumber on private terms, and schooner John C. Smith, from Wilmington, N. C., to Ponce, Porto Rico, with lumber at \$8.75.

Savannah.

[From our own Correspondent.]

Savannah, Ga., September 11.

The fiscal year which closed on the 31st of August furnishes an interesting record of the various industries of Savannah, and the lumber industry, among others, seems to have shared bountifully in the volume of trade of this port. The course of the lumber market during the past year has been towards decidedly higher values, the advance ranging from 50 to 100 per cent. on all wood products. The News of this city, in its special edition of the 7th inst., says: "Trade in this line has been very satisfactory, both as to the volume of business and prices. Aside from a falling off in the demand for cross-ties, the exports of lumber have exceeded those of the previous year and prices have ruled unusually high. It will be remembered that 1898 was a record-breaker in the exportation of lumber, so that to assert that the exports in this line have been an increase over the preceding year means an enormous output of lumber for the country contiguous to Savannah. The demand for lumber has been so great as to have no precedent for years, and saw mills have run in full blast in the endeavor to supply the enormous demand." The coastwise shipments of lumber from this port for last year aggregated 139,552,867 feet, and foreign shipments 2,383,290, making a total for the year of 141,936,157 feet. The demand from Northern and Southern sources is now steady and prices show a tendency to a further advance. Advances continue very encouraging from all milling sections and mills are generally running at their full capacity in order to fill contracts. On

Saturday the market closed firm with the following quotations, f. o. b. vessel at this port: Minimum yard sizes, \$12.50 to \$14; car sills, \$13.50 to \$15; difficult sizes, \$16 to \$25; ship stock, \$25 to \$30; sawn ties, \$10.50 to \$11, and hewn ties, 33 to 36 cents. The freight market continues steady, with a scarcity of desirable tonnage. Rates on lumber sail to Baltimore, \$5 to \$5.25; to Philadelphia, \$5.25 to \$5.50; to New York, \$5.50; to Boston and Portland, \$6.50 to \$6.75; cross-ties to Baltimore, 17 cents, basis forty-four feet; to Philadelphia, 17½ cents, and New York, 18 cents. Late charters are brig Leonora from Brunswick to New York with lumber at \$6.25, and schooner H. F. Shares, 393 tons, from St. Louis to Norwich, Conn., with lumber on private terms.

Mobile.

[From our own Correspondent.]

Mobile, Ala., September 11.

The fiscal year of 1899-1900 has opened fairly active with a fair volume of trade in both lumber and timber. The market for sawn timber continues firm and unchanged at 12½ to 13 cents per cubic foot, 40-foot basis. Cypress logs are in good request at 6 to 10 cents per cubic foot. There is also a good demand for round ash, oak, poplar, cottonwood and gum. Pine saw logs command a good price and are quoted at \$5.50 to \$7.50 per thousand feet. Hewn timber is in light supply and quoted at 13 to 13½ cents per cubic foot, basis of 100 cubic feet, average B1 good. There is a fair demand for hewn oak and for oak the quotation remains at 12 cents per cubic foot. The movement in lumber continues fair and the demand heavy, with values appreciating. All the mills in this section are well supplied with orders and shipments continue to the usual ports. During the week the steamer Dudley cleared for Boca del Toro with 22,000 feet of lumber; schooner Otis for Havana, Cuba, with 215,318 feet of lumber. The ship Harold cleared for Havre with 22,129 cubic feet of sawn timber, 11,000 cubic feet of hewn timber, 423,805 feet of timber, and steamer Saba for Grangemouth with 51,667 cubic feet of sawn timber, 5000 feet of hewn timber and 34,404 feet of lumber. The following shipments were reported for the year 1898-99: Lumber, coastwise and foreign, 84,497,608 feet; to railroads, 15,000,000 feet; to Ship Island, 750,000 feet; local and rivers, 20,000,000 feet; timber direct, hewn, 15,843,036 feet, sawn 73,458,864 feet; towed to Ship Island, hewn, 250,000, sawn 500,000 feet, making a total of 210,299,508 feet, against 138,307,823 feet, being an increase of 71,991,683 feet. Among the charters the following are reported: British steamer Sturton, 1352 tons, from Ship Island to Newcastle with timber at 130/; steamer Frey, 1948 tons, from Pensacola to United Kingdom or Continent with timber at 112/6.

Lumber Notes.

The receipts of lumber last week at New Orleans amounted to 1,714,000 feet, and for the season 10,426,041 feet, against 9,904,700 feet last season.

A charter was issued last week at Charleston, W. Va., to the White Oak Lumber Co. of Pikeville, Ky. The incorporators are Jeff Davis and others of Pikeville.

The Texas Timber & Mercantile Co. of Terrell, Texas, was chartered last week, with a capital stock of \$10,000. The incorporators are F. M. Falke, M. W. Raley, B. F. Gill and others.

A large shipment of walnut logs was made on the 5th inst. from Lancaster, Ky. The timber was purchased by an Eastern firm, which will ship it to Germany via Newport News, Va.

The proprietors of the fiber and veneer plant recently established in Huntsville, Ala., put in their water plant last week, and the entire plant will be ready to start up by the 1st of October.

The dry-kiln of the Calcasieu River Lumber Co. at Lake Charles, La., with 60,000 feet of lumber, was completely destroyed by fire on the 2d inst. Loss about \$1500; insurance not known.

The Gerdes Stave Co. of Winona, Miss., was chartered last week with a capital stock of \$15,000. The company will buy and sell timber land and engage in the manufacture of staves and lumber.

By a circular issued on the 5th inst. and effective on the 8th inst. the Louisville & Nashville Railroad raises rates on yellow-pine shingles and laths from all points south of Decatur, Ga., one cent per 100 pounds.

W. C. West of Ocean Springs, Miss., closed a deal on the 8th inst. with Messrs. Hoogstroom & Stray of Michigan disposing of 4440 acres of timber land near Ocean Springs for a consideration of \$13,320.

The New River Stave Co. of Roanoke, Va., was chartered last week with a capital stock of \$5000. The principal office will be at Roanoke. Dr. J. L. Shukland is president and W. A. Perigo, secretary and treasurer.

The schooner L. N. Dantzler, with a cargo of mahogany, arrived at Scranton, Miss., on the 7th inst. and was shipped by the Louisville & Nashville Railroad to St. Louis, Mo., where it will be manufactured into furniture.

Brown & Co., the largest tie contractors in the South, are moving from Barnwell, S. C., to increase their forces on the Seaboard Air Line extension, Cherard to Columbia, to complete their cross-tie contract with that company on time.

The Lafayette Mill & Lumber Co. of Baltimore, Md., was incorporated on the 11th inst., with a capital stock of \$2500. The incorporators are Richard Cromwell, Jr., Charles Hammond Cromwell, John J. Duffy, Charles W. Belt and Martin J. S. Cromwell.

The Farmington Planing Mill Co. was chartered last week for the purpose of engaging in the planing-machine business. The principal office will be at Farmington, Marion county, West Virginia. The incorporators are Malcolm S. Murray, Charles Morris and others.

Mr. Rosengrant, a large stave dealer of Savannah, Ga., was in Pensacola, Fla., last week looking after the loading of the steamship Roma, which was cleared last week from the latter port with 200,000 staves and other cargo for Bordeaux, valued at \$20,000.

A stock company was organized last week at Paragould, Ark., for the manufacture of lumber, hubs, spokes, axles, etc., with a capital stock of \$10,000. Mr. Eli Meiser is president of the company; J. B. Avera, vice-president, and T. B. Kitchens, secretary-treasurer.

The Red Cypress Lumber Co. was incorporated at Macon, Ga., last week with a capital of \$50,000, all paid in. The incorporators are E. A. Hallam, W. W. Hallam and J. T. Wright, who have applied for a charter. The principal office of the company will be in Macon.

At a land sale at Blakely, Ga., on the 1st inst. G. W. Roe and the Choate Land Co. of Oshkosh, Wis., sold 25,000 acres of land for a consideration of about \$100,000. The club of purchasers were Messrs. John J. and H. H. Flowers of the Flowers Lumber Co.; Mr. R. E. Steiner of Montgomery, Ala.; Mr. J. W. Calahan of Blakely; Mr. I. G. Shingler of

Ashburn, Ga.; Mr. J. P. Williams of Savannah and others. The lands sold are a body collected by Mr. Welcome Hyde of Wisconsin about eight years ago.

A tract of 40,000 acres of undeveloped coal and timber lands in Kanawha and Boone counties, West Virginia, owned by Major T. L. Brown of Charleston; Col. J. L. Cochran of Charlottesville, Va., and Dr. John Byrne of Brooklyn, N. Y., is advertised for sale. The land is valued at \$10 per acre.

C. F. Streights' immense saw-mill plant in Lake Centennial, near Vicksburg, Miss., was sold on the 7th inst. to Anderson & Tully of Memphis for \$30,000 cash. The mills have a capacity of 100,000 feet of lumber per day. The plant will be largely increased and a box factory built in connection with the mills.

The Perkins Manufacturing Co. of Augusta, Ga., has purchased from Mr. D. Slusky of that city the Lynch lumberyards for the storage of lumber. The Perkins Manufacturing Co. will operate a complete planing mill on its new purchase. The machinery has been ordered and the plant will be in operation in less than thirty days.

The Oakfield Lumber Co. of Macon, Ga., was incorporated last week with a capital stock of \$50,000. The incorporators are H. B. Erminger, C. W. Kirby and W. E. James. The principal office will be in Macon. The company will erect saw-mill plants for the manufacture of lumber, buy and sell timber lands and do a general mercantile business.

Timber lands in South Carolina are in great demand, and it is stated that large syndicates of Northern capitalists are controlling millions of acres in that State. One concern alone, it is said, has obtained possession of 100,000,000 feet of timber. The price paid ranges from 50 cents to \$6 per acre, with other conditions quite as advantageous to the purchaser.

Judge W. S. Lewis of Charleston, W. Va., has purchased 30,000 acres of superior timbered lands on Lens creek, near Racine, W. Va. The oak timber thereon will be manufactured into staves and the poplar and other varieties of timber will be sawed into lumber. The largest saw-mill plant in the State will be established at the forks of Lens creek. The work of developing the property will commence at once.

It is stated that the Angola Lumber Co. of Norfolk, Va., has had for several weeks buyers in Bladen, Pender and Onslow counties, North Carolina, buying timber lands. The company has secured options on and purchased thousands of acres of yellow pine, oak and cypress. The Blade Lumber Co. it is said, is also making purchases in Eastern North Carolina as far down as the lower edge of Duplin county.

The monthly meeting of the Georgia Saw Mill Association was held at Waycross on the 1st inst. The attendance was large, including many from South Carolina and Florida. The meeting was called to order by Secretary Agnew, and, on motion, Mr. J. B. Fender was elected chairman. The coastwise price-list was advanced from fifty cents to \$2.50 per 1000 feet, and it was decided to add to it a grouping of building sizes of standard grade, also laths, shingles and staves. There was no change made in the interior price-list. The next meeting will be held at Savannah, October 3d.

The builders' trial trip of the steamer El Norte, the second of the new Morgan Liners completed by the Newport News Shipbuilding & Dry-Dock Co., was satisfactory. The vessel will be placed upon the New Orleans route.

MECHANICAL.

Caskey Portable Hydro-Pneumatic Riveter.

The engraving shows a sectional view of a new style portable riveter manufactured by Messrs. Pedrick & Ayer, Philadelphia, Pa., especially adapted for ship-yards and structural-iron works and the use of boiler-makers and bridge-builders.

The "Caskey" portable hydro-pneumatic riveter is designed for using compressed air as a prime mover, with the hydro-

trol all movements of the riveter whether standing at the side, back or front of the machine.

No adjustment of the length of the dolly bar or the rivet dies, No. 17, is required when riveting on various thicknesses of metal.

The dolly bar has a movement of four and one-half inches. The first two and one-quarter inches is known as the rapid movement, which is set down direct by the pressure from the receiver tank of eighty pounds. The last two and one-quarter inches is called the effective

All machines are proportioned for using compressed air at eighty pounds per square inch, and to exert whatever pressure on rivets is required. Messrs. Manning, Maxwell & Moore, 85, 87 and 89 Liberty street, New York city, are the sole sales agents, and will be pleased to send descriptive catalogues and any further information desired.

Special Textile-Mill Pulleys.

The pulleys illustrated herewith have been adopted because of their exceptional merit in many of the best-equipped mills

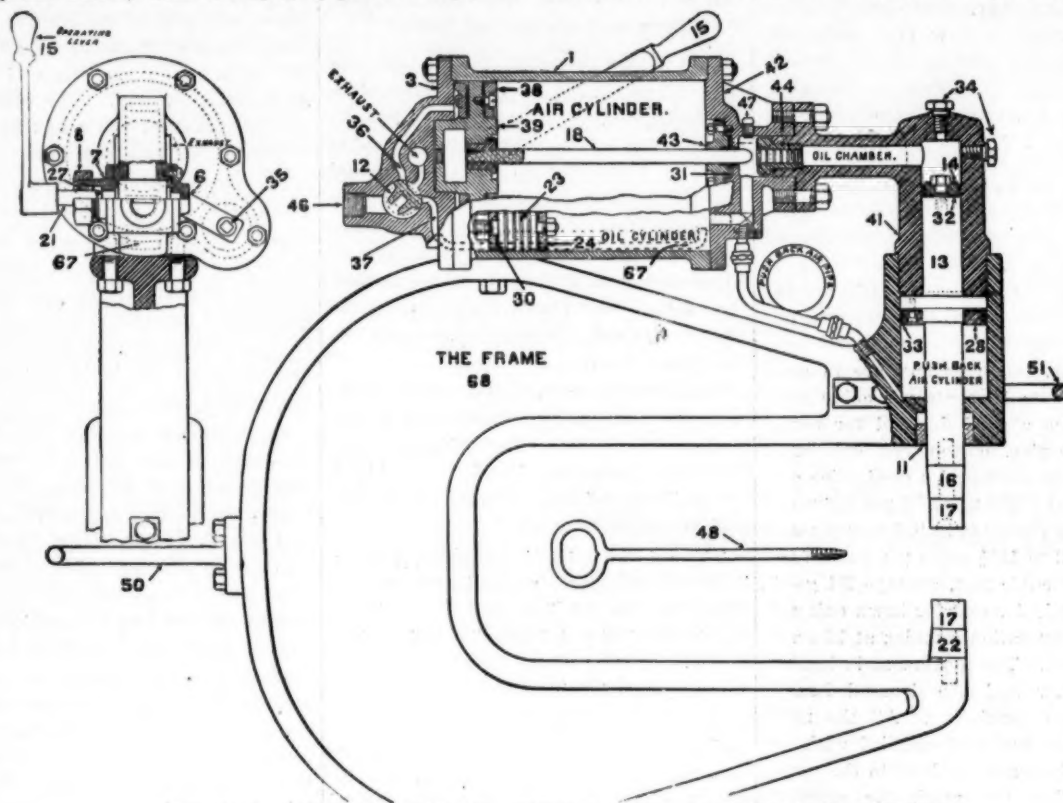
agency, 40 South Forsyth street, Atlanta, Ga., Mr. W. L. Draper, manager.

Boiler Cleaning.

One of the perplexing subjects connected with manufacturing is the inability to properly clean boilers. The general manager has more important matters to attend to, and frequently refers it to his superintendent, who refers it to his boiler boss, and he in turn to the man who shovels in the coal. The last-named not having the proper tools, and having no opportunity of knowing what is on the market, uses a hose or a scraper, or probably both, and having done his work to the best of his ability with the means at hand, reports his boilers clean, caps them up, and the waste goes on unknown and undreamed of by the man whose money is being burned. The plebeian business of boiler cleaning is a serious one and requires special tools designed and made by expert toolmakers.

The Union Boiler Tube Cleaner Co. of 237 Penn avenue, Pittsburg, Pa., now in the fifth year of its business as a corporation, has perfected mechanical power-driven devices for removing all conditions of scale from all makes of water-tube boilers, as well as all types of horizontal straight-tube boilers, and its success has been marked. Fancy for a moment a curved three or four-inch tube eleven to eighteen feet long containing one inch of scale too hard to be cut with a cold chisel, cleaned out and polished like a rifle barrel from end to end with one going through with the device, and then endeavor to realize what must be the saving in fuel by such a process, with a corresponding increase in the efficiency of the boilers. There has been so much said and done on the subject of boiler cleaning that users had become somewhat skeptical, and this company has been put to some very severe tests by the largest concerns in the United States and England before they would adopt the devices, and it is with considerable pride it is able to say that never yet was the device removed from a plant where a demonstration was made with the view of its purchase. The practical results of tests made by intending purchasers' own experts removed all doubts as to the efficiency of this company's methods.

In March, '98, the initial machine was



SECTIONAL VIEW OF CASKEY PORTABLE HYDRO-PNEUMATIC RIVETER.

carbon fluid used in the oil chambers and oil cylinders.

This admits of the machine being operated in very cold weather and in open places, with no liability of freezing and causing trouble, and is an important feature.

The engraving is largely self-explanatory. The main frame, No. 68, is a steel casting, and can be made in any desired shape adapted to the conditions and positions in which the riveter is to work.

The oil chamber and pressure cylinder, No. 41, is made from nickel steel forging, and accurately machined.

The dolly bar or hydraulic piston, No. 13, is manufactured of the best tool steel, accurately machined, hardened and ground. No. 42, inside cylinder head, is of cast steel.

This riveter is built for very hard usage and the least liability of breakage. There are but four moving parts, and the operating lever, No. 15, is the only moving part exposed.

All packings are easy of examination.

The construction of the machine secures the maximum pressure on a rivet, with as little weight in the machine as is possible.

It works rapidly, without shock or jar, is easy to handle and gives a uniform pressure on every rivet.

No blow is given when using this machine, and therefore no crystallization takes place upon the rivet when being driven.

The riveter is suspended by a bale, which allows it to be moved and operated in either a vertical or horizontal position; by changing the bale it can be used sideways with equal facility.

Suitable handles are provided on front and back for the convenience of the operator in placing it over the work.

The operating lever is so constructed and connected that the operator can con-

movement, and develops the maximum pressure, giving a uniform squeeze throughout the entire stroke of the last two and one-quarter inches, which causes the hot rivet in the hole to be very nicely upset, filling the hole solid. This pressure is exerted on the dolly bar through the hydro-carbon fluid, which is non-freezing, and so long as the operating valve is open, admitting compressed air to the main piston, the maximum squeeze is maintained on the rivet.

of the South. They represent the "Special" textile-mill pulley manufactured by the Dodge Manufacturing Co. of Mishawaka, Ind. Some years ago this company, appreciating the great demand for a special pulley for use in textile mills, designed and built this pulley. It is an iron spider and a wooden rim, and embraces all the advantages of both the iron and the wood types. The superior belt traction of the wood rim over the iron rim is a fact beyond dispute. The



SPECIAL TEXTILE-MILL PULLEYS.

After a rivet is headed the dolly bar and the die are positively moved back from it by a quick movement of the operating lever. Every detail entering into the construction of this riveter has been studied to make it as perfect as possible. It is made of the finest quality of materials, with specially-designed machine tools, and thoroughly tested before leaving the shops of the manufacturer; built in twenty-one different styles and sizes for driving rivets from three-eighths inch to one and one-quarter inches.

light rims and spiders used in the construction of those sizes where narrow shifting belts are intended, as on looms, spinning-frames, etc., make a particularly effective and neat design. The iron spider also reduces to a minimum the surfaces of the pulley liable to collect lint. During the past two years thousands of these pulleys have been placed in textile-mill service, and all with the same perfect satisfaction. Information and prices can be obtained from the Dodge Manufacturing Co., or from its Southeastern sales

shipped to England. On June 20, '99, the second order came from the same concern, since which time six other devices have been shipped to England and Scotland, all growing out of the knowledge gained by the value of the first device. The Union Boiler Tube Cleaner Co. has also been subjected to tests by inspectors of boiler insurance companies as to whether the device would cut through a tube or expand a thin place in a tube, being compelled to run for fifteen minutes in one spot in a tube taken from

a 16-year-old boiler in which the 18-foot tubes had been cleaned by this company's device on an average of eight minutes each. This crucial test removed every doubt on the subject, and was so reported to headquarters.

A fully-equipped shop and fourteen mechanics is manufacturing the Union devices, with at least as many more expert operators in the field cleaning boilers by contract, which they do at a fixed price per tube, or sell or lease their devices as parties may wish.

The device can be seen in operation in Baltimore at the plant of the United Electric Light & Power Co., at 700 West Pratt street. Many concerns have adopted this company's devices after trying everything suggested, among whom are the representative firms of America.

Steel-Apron Refuse Conveyor.

Our illustration is a view of a "Jeffrey" steel-apron refuse conveyor in operation at the Boston (Mass.) refuse disposal plant. This conveyor consists of two strands of Jeffrey roller chain running on an iron

a practically tight joint, while at the same time it stiffens the plates so that comparatively light metal can be used.

For further particulars address the maker, the Jeffrey Manufacturing Co., Columbus, Ohio.

Milling and Mining.

To prehistoric man is given the credit of having discovered that a handful of grain could be ground to a powder if rubbed between two stones, and on this principle is based the present methods of grinding, except that other method, which prehistoric man also discovered, that of throwing one stone against another to break it into finer pieces. Countless ages have passed, and the bones of the great inventor have moldered into dust and scattered to the four winds of heaven, although great men have lived and died, and man is said to have become civilized, yet we find him, aborigine that he is, rubbing two stones together to produce his handful of powder. Looking backward we find that some generations ago a genius put a number of stones into a

of the greater area of grinding surface over all other classes of mills, since the entire surface of the cylinder and of the pebbles acts as grinding surfaces. Again, on account of this large area and the small contact pressure necessary, the wearing parts, lining and pebbles were found to last very much longer than the wearing parts of other machines, and when, after years of use, they could be easily, quickly and cheaply replaced. These patent pulverizing cylinders required no redressing as other mills, no adjusting for different materials, no attention while running, and they cleaned themselves out. They accomplished their work by the sliding, rolling and tumbling of the great number of pebbles upon themselves and upon the lining.

No sooner had the pottery trade become convinced of the advantages than their use was extended to the manufacture of glass, to the grinding of chemicals and drugs, to enamel, to cement, to fertilizer, and even to the ores of gold and other precious metals to which they had been adapted by the improvements made in them, and rapidly found favor wherever there was material to be ground.

Improvement is the order of the day, and among these may be found the invention of the "patent continuous feed and discharge pulverizing cylinders," in which the Alsing Company scored one of the greatest advances in the history of pulverizing machinery, for these machines required little or no attention, whether by the wet or dry process; they were unexcelled for either grinding or mixing; they did not contaminate or discolor the material, and, being continuous in their feed and discharge, greatly increased the output by saving the time required to charge and discharge the original cylinder, and by discharging the fine as fast as ground left the coarser free from the cushioning or interference due to the presence of the fine as in the original form; again, the wear and tear was greatly reduced because the material was always present to act as a cushion between the pebbles and between the pebbles and the lining, and when, after years of use, the wearing parts, pebbles and lining are as easily, quickly and cheaply replaced as in the older type of cylinder. Another great advantage was that these cylinders were dustless in their operation, and required no housings or coverings, which had been a source of great annoyance by not permitting the radiation of heat developed by the machine.

In 1894 the Manufacturers' Record published an article entitled "Treatment of Gold Ores," and at that time many of these machines had found their way into the market, and their special advantages were mentioned in the article. Shortly after this the demand for this class of machine had become so general that independent parties found it to their advantage to copy the ideas of the Alsing Company, and marketed machines with varying names, such as "combination mills," "ball mills" and "tube mills," to express the variation in design which they had given them; thus the combination mill was built with partitions after the German style, the ball mill was charged with larger pebbles or balls, and the tube mill was so called because of its great length in comparison with its diameter. These machines were copies of the "Alsing" patent pulverizing cylinder and the "Alsing" patent continuous feed and discharge cylinders, and whether marketed under one or the other of the above names the cylinders have become the predominating pulverizers for many materials, including that immense and growing industry, the Portland Cement trade, and is gaining from day to day not only here, but in foreign countries.

In the years of experience one great and ever-present complaint has been that no machine would produce a perfectly uniform and equally divided product without a great sacrifice in capacity, for no matter how homogeneous a material may appear to be, there are portions or particles in it less friable than others, and these particles will float out with the finished product. But as improvement is the order of the day, the J. R. Alsing Co. has again brought forth a pulverizer which will be highly appreciated by all such industries as require an absolutely uniform product.

There is only one thing the J. R. Alsing Co. claims it cannot improve upon, and that is, the universal pleasure with which it furnishes information to all inquiring.

THE J. R. ALSING CO.

Literary Notes.

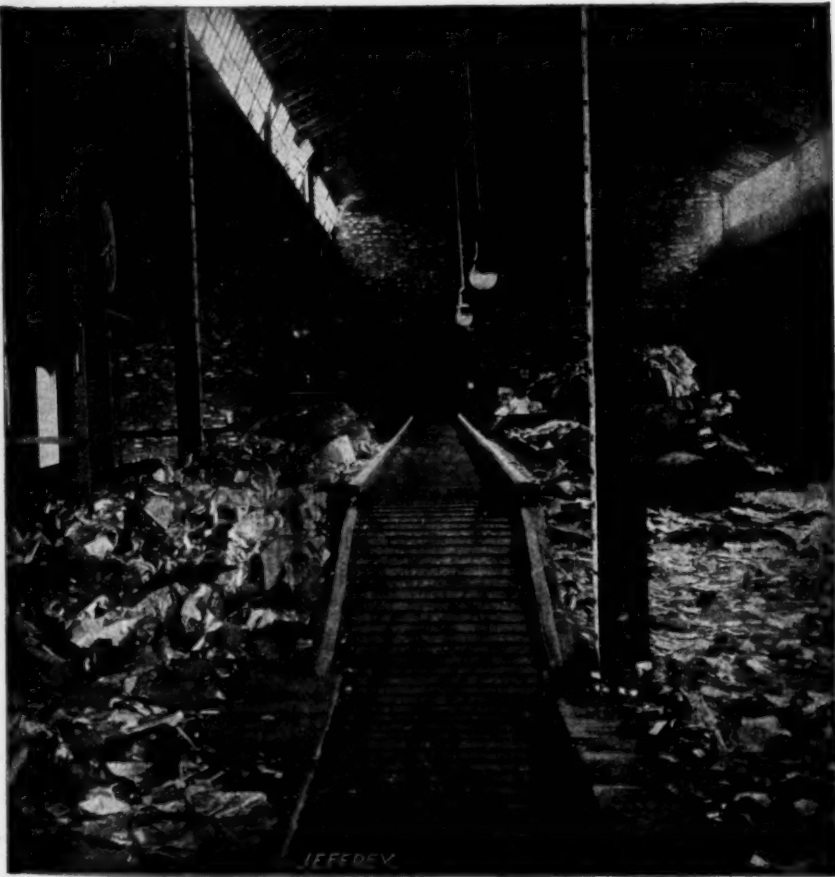
The approaching Paris Exposition will attract a host of American visitors. The majority of us will be compelled to stay at home. Yet there is no reason why reading clubs and individuals should not choose the exposition time for an enjoyable and profitable journey through France via the pages of the Chautauquan. With camera and in company of guides who know what it is worth while to see, one may take the ocean voyage, visit historic Paris, go shopping and sight-seeing, get acquainted with the art life of Paris, see the great exposition itself, view the suburbs of the city, travel thence through the provinces, and gain by such a tour, and special reading in connection with it, a comprehension of France and its exposition which many an actual visitor would do well to obtain.

The September number of the Cosmopolitan Magazine can well be termed "The Timely Topic Number," for it contains an authoritative article on international yacht racing by John R. Spears, the naval historian, lavishly illustrated, and clever descriptions of New York's roof-gardens by Vance Thompson, with such photographs of those aerial places of amusement as were never printed before; an article on the French spying system by a former chief of a department of the French secret police, and the story of the mountain feuds of Kentucky, told by a well-known Kentuckian, Col. J. Stoddard Johnston. Aside from this, there is much excellent fiction and the usual number of profusely illustrated and interesting special articles.

Mrs. John Drew, in the last year of her life, wrote a sketch of her stage career for her children and grandchildren. This has been secured for Scribner's Magazine and will appear in the October and November numbers, with an introduction by John Drew, her son. Peter Gilsey and Douglas Taylor have put their fine collections of photographs and prints at the disposal of the publishers, and a very interesting series of illustrations will accompany the memoir. Mr. Taylor has written the biographical notes.

A dispatch from Greensboro to the Raleigh Post tells of the development of the country between Charlotte and Raleigh along the Southern Railway. Among the industrial improvements noted are a new hame factory in course of construction at Lexington, a chair factory to be started at Lexington, a new sash and blind factory at Thomasville, and at High Point increasing activity in the woodworking establishments.

Mr. E. K. Palmer and others have incorporated the South Carolina Fire Insurance Co. at Columbia, with a capital of \$100,000, to do local business only.



STEEL-APRON REFUSE CONVEYOR.

track, to which double-beaded or corrugated steel plates are fastened, forming a complete endless apron. This style of conveyor is adapted to a great variety of purposes, but in this case handles the sweepings and general street refuse, consisting of rags, paper, bones, etc., which are delivered to the conveyor and by it to the burner.

While in transit the material is carefully assorted by pickers at each side of the conveyor, and all particles that cannot be burned, or such as possess value for special purposes, are taken out. This conveyor is over 100 feet in length, being supported by a steel angle iron structure rising from the ground level to a sufficient height for delivery into the burner.

The conveyor in transit operates over two curves, which is easily accomplished owing to the rollers in the chain, occurring every link, which enable the chains to accommodate themselves to comparatively short curves without the assistance of sprocket wheels or idlers of any kind, which is generally in the way when handling rags, paper, etc., or any material of a fibrous nature. The corrugations of the flights overlap so as to make

stone jar partly filled with the material, and after stirring them together marveled at his success; he told his neighbor, and the foundation was laid for a flourishing and an ever-increasing industry—an industry which was unknown except in Germany and Denmark until some thirty-odd years ago (1867), when it was introduced into this country by Mr. J. R. Alsing, who by January, 1869, had organized a business which has found a worldwide and an ever-increasing trade under the name of the J. R. Alsing Co.

After following the active interests of this company for some years Mr. Alsing removed to London, where he established and continues to conduct business under the same firm name.

Mr. Alsing's first "patent pulverizing cylinders" were simple cylinders revolving on their axes, lined with porcelain and charged with pebbles. They were especially adapted to the pottery trade to keep the material pure and unadulterated with foreign substances, iron in particular, which had previously been a great drawback by discoloring the finished product. When tried, these cylinders were found to grind with surprising rapidity because

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

Royalties and Common Sense.

[Cotton Planters' Journal.]

Although many arguments are being advanced against the recent introduction into the South of baling processes, which past experience has shown will save the cotton growers many thousands of dollars annually, it is evident to all familiar with the situation that the one great remedy for the producer, in the face of low prices on his staple, is the reduction of the cost of handling his product. The press of the entire South recognize this, and are advocating the use of whatever machinery is necessary to work such an end.

If the baling, at the gin, into a compressed package, accomplishes this end, as experts and those who have used the new baling methods assert, what difference does it make to the planter, who needs all he can get, whether the plant which converted his seed cotton into a finished package, ready for the spinners' hands, was sold to the ginner outright, or was leased for a period of years, if he is benefited by a better price for his cotton and a saving in the expense of handling after it is ginned?

The arguments against the American Cotton Co.'s cylindrical-bale process, which to our mind in compressing right at the gin means much to the planters, comes from a class who are unreasonable, if they will but consider the question closely, and not act through personal prejudice.

Simply because this invention is placed upon the Southern markets, where their demand springs from, upon a plan of lease and patent royalties, instead of being sold outright, efforts are being made to decry the methods, and the farmers are being told to shun it, as they would any trust or monopoly organized to operate against their condition.

In a disinterested way, save for argument and our desire to see the planter profit, we fail to note where the new baling and compressing methods can cause him any grounds for grievance.

It is plain that he saves money by discarding old ideas, and men whose words are not to be disputed have said time and again that there was not the slightest phase of trust or monopoly apparent in the new systems. His cotton is graded at the gin under the new idea, and right before his eyes, while it is graded under the old methods miles from his home, and after being handled many times and in all kinds of weather, before it reaches its destination.

It is fair to believe that in either case his grading could be right or wrong.

Going into the royalty feature, the attitude of those who talk the new processes down is unreasonable also, for in nearly all the industrial arts of manufacture, in the cotton and woolen mills, in bicycle and machine plants and in all up-to-date printing offices devices are in operation which are paying royalties in some way or another to the inventor or those who manufacture for him.

Coming down to rock bottom, we have an instance right in our own office, in the telephone, which in constructive value is not worth more than \$5, for which we

pay in rents \$60 per year. We recognize in it a labor-saving device, which is profitable to us, and the question of ownership is not considered at all.

We fail to see why exceptions should be made to the system of the American Cotton Co. or any other like process in view of the facts above stated.

Cotton Movement.

Cotton is beginning to move more rapidly at the beginning of this season than at the beginning of last season. According to the report of Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, with more than 300,000 bales left over from the last crop in sight, the amount brought into sight during the first eight days of this season was 177,639 bales, an increase of 90,675; exports were 24,144 bales, a decrease of 10,022; takings by Northern spinners were 23,956 bales, an increase of 13,291; by Southern spinners 32,170, an increase of 3200 bales.

To Start With 5000 Spindles.

The Sanford Cotton Mills of Sanford, N. C., which was reported some weeks ago as incorporated, has completed arrangements ensuring the immediate erection of its plant. Foundation for the building is now being constructed, and the building will be of a size to accommodate 10,000 spindles and 500 looms. At the start the company intends to put in only 5000 spindles and 250 looms, using a capital of \$100,000; after this is in successful operation the building will be filled with machinery. Mr. T. L. Chisolm is manager of this enterprise.

Textile Notes.

It is reported that arrangements have been completed for the removal of a 2000-spindle cotton factory from Cincinnati, O., to Clinton, La.

Mr. Louis Kohlmann contemplates adding a knitting department to the Semmes & Parker cotton factory at New Orleans, La., noted last week as to be put in operation.

The Business Men's Association of Greensboro, N. C., is formulating plans for the organization of a \$100,000 cotton-mill company. It is said that over \$80,000 has been subscribed.

It is proposed at Jackson, Miss., to organize the People's Textile Co., for the erection of a factory; capital stock to be \$100,000. Payments of subscriptions are to be made on the monthly instalment plan.

It is announced that the managers of the warehouse at Newberry, S. C., have made an arrangement whereby planters will be able to secure money at 7 per cent. to the value of 80 per cent. of their cotton stored there.

The first shipment this year from the American Cotton Co.'s round-bale plant at Temple, Texas, was made last week. The car contained 136 bales, aggregating 60,000 pounds in weight.

Efforts are being made at Hickory, S. C., for the organization of a stock company to build a \$50,000 cotton factory. Col. J. R. Ashe of the Yorkville (S. C.) Cotton Mills and R. M. Carroll of Blairsville, S. C., are interested.

Messrs. C. D. Nesbitt & Son of Fork Shoals, S. C., manufacturers of cotton goods, are said to have in contemplation the formation of a stock company to enlarge their mill and develop their water power to its fullest extent.

The cotton-factory movement at Vicksburg, Miss., is progressing. Subscriptions to the stock are being readily obtained. Among those interested are Messrs. J. D. Laughlin (chairman), J. P. Backes, Mur-

ray F. Smith, W. H. Fitz-Hugh and A. Rose.

The Anthony Cotton Mills of Wilson's Mills, N. C., has been organized for the manufacture of yarns. It is the intention to build a mill of small size, and manufacturers of the necessary machinery are invited to correspond relative to submitting bids, etc.

Mr. D. P. McBrayer of Anderson, S. C., is forming a company for the erection of a yarn and knitting mill. The capital stock will be \$50,000, and nearly the entire amount has been subscribed. Plans have not been received for buildings nor details settled as to machinery.

The Mandeville Cotton Mills of Carrollton, Ga., has been incorporated, with capital stock of \$200,000, to build and operate cotton factory. Incorporators are Messrs. L. C. Mandeville, G. H. West, S. Holderness, B. F. Bass, B. F. Rigsby and others. Mr. Mandeville was mentioned some weeks ago as endeavoring to organize this company.

The Berkley (Va.) Knitting Mills, lately reported as incorporated, has for its president George W. Simpson; W. L. Bailie, Jr., secretary-general manager, and Samuel S. Simpson, treasurer. The first two named are of Berkley, and the last of Norfolk. The directors are Messrs. George H. Bliven and Charles L. Nelson and the officers named.

The Newnan (Ga.) Cotton Mills will increase its spindles from 6280 to 10,000 in number, making an addition of 3720 spindles. An addition will be made to main building of eighty-eight feet, besides building an office and warehouse. Order for a portion of the new machinery has been placed, and the remainder will be ordered in a few days. Power plant will also be increased.

The cotton-mill company lately reported as proposed at St. Francisville, La., is about assured. The capital stock will be \$50,000, and it is intended to follow the monthly-payment plan of disposing of the stock. A committee is now soliciting subscriptions, and it consists of Messrs. J. P. Bowman (chairman), R. M. Leake, F. B. Barrow, D. L. Newsham, J. F. Irvine and L. T. Kilbourne.

The Virginia Textile Co. of Lynchburg, Va., reported recently as formed by New York and Virginia parties, has contracted for the erection of its buildings. Contract was awarded to J. E. Parrish, the plans having been prepared by J. M. B. Lewis. The structures comprise four buildings, 60x200 feet, 20x60 feet, 35x135 feet and 18x40 feet; they will cost \$14,500. There will be 160 operatives employed in producing knit goods.

The Merrimack Manufacturing Co. has purchased a 100-acre tract of land on the crest of Russell Hill overlooking Huntsville, Ala. The tract is to be used as a reservoir site to supply water to this company's large cotton mill to be built at Huntsville. The crest of the hill is solid limestone rock, and the basin will be blasted out to have a capacity of 50,000,000 gallons. The mills' pumping station will have a daily capacity of 6,000,000 gallons to supply the main factory, cottages, etc. The Merrimack Company is of Lowell, Mass.

The Estelle Cotton Mills Co. of Selma, Ala., has been organized, with O. F. Cawthon, president; A. W. Cawthon, vice-president; R. H. Mabry, secretary-treasurer, and T. L. Wainwright (of Stone-wall, Miss.), consulting superintendent and manager of sales department. This company will operate the Selma (Ala.) Cotton Mills, which plant was sold recently at public outcry, as mentioned in these notes. The equipment is 5000 spindles and 144 looms, but there is room for

5000 more spindles, which the new owner intends to install in the near future.

The Lula Manufacturing Co. of Kings Mountain, N. C., recently reported as incorporated, will establish a 7500-spindle plant. Mr. P. S. Baker has been chosen president, and he states that his company will erect a building 78x224 feet in size, one story high, with provision for extending to 381 feet; at the start 2500 spindles will be installed, with a daily capacity of 7000 pounds of yarn. Soon after operations are being successfully conducted it is expected that the other 5000 spindles will be put in position, employing 100 hands. The capital stock is now \$50,000, to be increased to \$100,000 when the second instalment of equipment is arranged.

The Mount Vernon-Woodberry Cotton Duck Co., reported some weeks ago as organized, held a meeting in Baltimore, Md., last week and elected officers as follows: Richard Cromwell, president; vice-presidents, J. Spencer Turner, C. K. Oliver and W. K. Cromwell; executive committee, Messrs. Michael Jenkins, H. A. Parr, T. M. Turner, A. D. Jones, and the president an ex-officio member; board of directors, those mentioned above, together with Messrs. J. E. Hooper, D. H. Carroll, S. M. Lehman, G. K. Sheridan, F. F. Carpenter, Theodore Hopper, A. D. Jones, S. D. Warfield, E. A. Brinkerhoff. The new company is, it will be recalled, a consolidation of the principal cotton-duck manufacturers of the country, controlling about 90 per cent. of the American output. The capital is \$23,500,000.

Finished Stock Sold.

The Fifield Tool Co., Lowell, Mass., writes to the Manufacturers' Record as follows: "Our business is extremely good, much more so than for some years past. We are all sold out of finished stock, and have a number of months' work ahead, making necessarily a larger supply of raw material on hand. Of foreign business, we find it holding about the same."

TRADE LITERATURE.

Finished Machine Keys.—In experiments of several years' duration there has been developed a line of costly machinery designed expressly for the purpose of placing on the market accurately-finished machine keys. The Standard Gauge Steel Co. of Beaver Falls, Pa., is the company that has developed this line, and its revised price-list is dated July 1, 1899. Finished machine keys, continuous section steel machine rack, gibs and keys of any required design, flat, square, round and special shaped steel finished to micrometrical measurements, etc., are comprised in the list. Copies on application.

Ventilating Small Apartments.—One of the greatest obstacles in the way of positively ventilating small apartments has been the difficulty of operating the fan introduced for the purpose. The B. F. Sturtevant Co. of Boston has made a careful study of this problem, has reduced the apparatus to the simplest form and presents in its Bulletin M illustrations and descriptions of its electrically-driven propeller fans. The motor is directly attached to the fan shaft. The fan is of the most efficient type, and the entire arrangement is readily portable. It may be instantly started and stopped by the mere operation of a switch.

Railroad Construction Tools.—Not the least of the activity which is noted on every side is that contained in the construction of new railroads and the extensions of established lines. The requirements of tools and apparatus in such construction work are of an extensive character, and those supplying them include the well-known Verona Tool Works of Pittsburgh, Pa. This company was first established in 1873, and has developed a line of business that is a constant tribute to the merit of its product. Some of the product is of the company's special design, and has proven its worth in practical use. A recent booklet presents the Verona line, with illustrations.

COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

The Market for Cottonseed Products.

New York, N. Y., September 13.

In the cotton-oil market there is a little more buying, with prices firm for spot and still stronger for forward delivery. The high price asked for seed tends to check crushing operations, although this it is hoped will prove temporary. During the week prices on crude oil were advanced on unfavorable crop reports from Texas and other sections of the cotton belt. Buyers, however, are slow to believe bullish reports and look for lower prices. The market may be said to be in an unsettled condition peculiar to this particular period of the year, just prior to new oil being marketed. The position of producers is, however, changed, inasmuch as they are not selling ahead at lower prices, which was a feature of the market a week ago, but rather insist on prices higher than market quotations for former delivery. The attitude of allied markets is, if anything, improved. Lard is quoted at 5.37½ cents, Chicago, December delivery. Tallow is steady at old prices, or 4½ to 4½ cents, Chicago. Concerning cotton oil, the lateness of the cotton harvest and the damage to the crop depicted in the recent government report is responsible for the more confident position of the mills, while the statement that a lesser yield of oil from seed—five gallons to the ton as compared with last year—together with 25 per cent. less seed, in Texas for illustration, where it commands \$1 to \$2 per ton more than the last crop opened at, or \$10, as well as at the Atlantic coast, has had much to do with shaping the market's course. "Hence," said a produce exchange authority, "refiners who sold heavily here for November to March delivery a month ago have refused to offer even at the enhanced prices of 1 to 2 cents per gallon, bringing new crop up to about the prices of old, which have been in fair jobbing demand. Latest advices from the South are to the effect that the seed shortage in Texas will run as high as 36, with the result that New Orleans is holding at nearby prices of this market. The foreign demand has improved, as have European markets generally, with the exception of Marseilles." The following are closing prices: Crude, 16½ to 18 cents; summer yellow, prime, 24½ to 25½ cents; summer bleaching, 25 to 26 cents; summer, off grades, 24 to 25 cents; yellow, butter grades, 27½ to 30 cents; white, 27 to 28 cents; winter yellow, 28½ to 29½ cents; salad oil, 30 cents. Liverpool and Hull refined is quoted steady at 15/9. Western packers bidding South and here bought considerable the past few days, and at 18 cents Memphis, at which 1000 barrels sold today, and 900 winter yellow at 20½ cents, and 500 prime yellow 26 cents, both spot. Tank crude has sold at 16½ to 17 cents in bulk, October shipment, in the Atlantic States and Texas, and 17 to 18 cents in the valley to refiners.

Cottonseed-Oil Notes.

Cottonseed is already being received at Raleigh for the cottonseed-oil mill of that city, which will start to crushing about the 15th inst. The mill will have feeders in various towns of the State.

It is stated that a \$50,000 plant for delinting cottonseed by a new chemical process is to be established in Houston, Texas, within a few weeks. The inven-

tor of the new delinting process is Prof. T. C. Thiele, a well-known chemist.

A charter was granted on the 5th inst. to the Wynnwood Cotton Oil & Manufacturing Co. of Wynnwood, I. T., with a branch at Oklahoma City. The company is capitalized at \$50,000, and the directors are Thomas P. Howell of Davis, I. T.; A. T. Schmid of Wynnwood, and J. F. Hargis of Oklahoma City.

The Gibson Gin & Oil Co., with places of business at Calvert, Bremond and Nesbitt, in Robertson county, Texas; Kosse, in Limestone county, and Branchville, Milam county, was chartered last week. The capital stock is \$100,000. The company will own and operate cottonseed gins and a cottonseed-oil mill. The incorporators are I. H. Gibson, R. C. Gibson, J. Adoue, R. H. Brown and F. S. Perry. The principal office will be at Calvert, Texas.

The cottonseed-oil mill at New Berne, N. C., has been making numerous improvements in its plant during the summer. The capacity of the seedhouse has been doubled, and a new baling machine known as the Champion baling press, made by the Famous Manufacturing Co. of Chicago, is ready to put in position. These, with other improvements, will give the company an up-to-date plant. The crushing season will commence about October 1. The company expects to install a complete fertilizer plant by the 1st of January next.

TRADE NOTES.

Iron and Woodworking.—The demand for iron and woodworking machinery is one of the features of the present industrial activity that is making busy times at the plants of those engaged in the production of the line referred to. One of the important American companies making iron and woodworking machinery, complete equipments for machine, boiler and bridge shops, etc., is the Monongahela Machine Tool Co. of Pittsburg, Pa. (office in the German National Bank building). Its line is of the most complete character in its class.

Jute Cordage.—The American Manufacturing Co., one of the largest manufacturers of fiber products in the world, has entered the market as manufacturer and distributor of jute cordage, and now that the prices of manila and sisal have advanced so materially, the users of baling and bundling cordage will be interested in this announcement. That the American Manufacturing Co. recognizes the present as opportune for entering the market with jute cordage is apparent by the intention to make for the present only such sizes and kinds as are commonly substituted for sisal and manila, when the cost for these latter becomes disproportionately excessive. (See advertisement.)

Boiler Cleaning.—The waste of money that can be engendered by an unclean boiler is an ever-present factor in the conduct of any business where such apparatus is in use. Devices have been introduced for boiler cleaning with more or less success from time to time. The Union Boiler Tube Cleaner Co. of Pittsburg, Pa., introduced during recent years its devices and methods for cleaning boiler tubes in boilers of any design, and the success that has been attained by it has been remarkable. In our mechanical department today is presented some interesting facts concerning the company's progress. Among the representative industrial establishments of America that are using the Union Boiler Tube Cleaner Co.'s methods and devices are Carnegie Steel Co. (fourteen orders), Jones & Laughlin, Pittsburg Reduction Co., American Sugar Refining Co., Spreckels Sugar Refinery, Pencoyd Iron Works, Westinghouse Air Brake Co., Solvay Process Co., Westinghouse Electric & Manufacturing Co., Armour Packing Co., Moerlein Brewing Co., Midvale Steel Co., Pennsylvania Steel Co., Procter & Gamble Co., American Steel & Wire Co., Sloss Iron & Steel Co., Union Rolling Mill Co., Aetna Standard Iron & Steel Co., Bellaire Steel Co., Baldwin Locomotive Works, American Tube & Iron Co., Lackawana Iron & Steel Co., Bethlehem Steel Co.

PHOSPHATES.

Phosphate Markets.

Office Manufacturers' Record,
Baltimore, Md., September 14.

The local phosphate market has shown a moderate volume of trade during the past week, and buyers are more disposed to add to their supplies. Tennessee rock has been selling with values steady at previous rates, and but little business has been done in Florida or South Carolina rock. Charters reported during the week were as follows: Schooner W. W. Ward, 1145 tons, from Port Tampa to Cartaret with phosphate rock at \$2.37½; British steamer Florence Pile, 2193 tons, from Port Tampa to United Kingdom or Continent with phosphate rock on private terms; schooner Mary Lee Patten, 522 tons, from Ashley river to Baltimore with phosphate rock at \$2.50; schooner Bayard Hopkins, 212 tons, New York to Charleston with fertilizer at \$1.50, and British steamer Robinia, 1314 tons, from Sicily to Baltimore with sulphur at 9/9, September. The record of mining in the Southern phosphate field during the fiscal year, which ended on the 31st of August, shows a remarkable increase over the previous year. The volume of business transacted and shipments from all ports marks the year as one of the most successful in the history of the industry. The total shipments for the twelve months aggregated 1,382,473 tons, of which 805,078 tons were foreign and 577,395 tons domestic. Of the gross shipments, South Carolina contributed 481,076 tons; Florida, 776,170 tons; Tennessee, 111,477 tons, and North Carolina, 13,750 tons. Prices have advanced sharply. Florida rock, which sold abroad last year at 7½, is now worth 9½ to 10 cents per unit. The situation at the moment is very satisfactory. South Carolina miners are generally enjoying a good demand, both foreign and domestic, with values firm and advancing. In Florida the market is also higher, and shipments from the ports will be very heavy during the present month. Advices from Tennessee are highly encouraging, the new territory is being rapidly developed and all the companies mining are making heavy shipments. Shipments of Tennessee rock to foreign ports last year through the port of Pensacola reached 100,016 tons. The market closed last week at Mt. Pleasant with values firm and unchanged.

Fertilizer Ingredients.

The movement in ammoniates still continues of moderate volume, and prices are about steady. There is very little Eastern demand, but there is a little more interest shown by Southern buyers, while sales to the latter section are still very light. There is some business in dried blood and tankage, with values firm. Nitrate of soda is firm, and a shade higher.

The following table represents the prices current at this date:

Sulphate of ammonia (gas)	\$3 12½ @ 3 15
Nitrate of soda	1 70 @ 1 72½
Blood	1 97½ @ 2 00
Hoof meal	1 70 @ 1 75
Azotine (beef)	1 95 @ 2 00
Azotine (pork)	1 95 @ 2 00
Tankage (concentrated)	1 65 @ 1 67½
Tankage (6 and 20)	1 70 @ 1 75 & 10
Tankage (7 and 30)	17 00 @ 17 50
Fish (dry)	20 00 @
Fish (acid)	12 00 @

Phosphate and Fertilizer Notes.

The total shipments of high-grade Florida phosphate rock from the port of Savannah for the year ending August 31 amounted to 72,270 tons.

The British steamship Roma cleared last week from Pensacola, Fla., with 2748 long tons of Tennessee phosphate rock for Bordeaux, France.

Mr. C. B. Meersellott of Des Moines, Iowa, has purchased phosphate territory

near Fort White, Fla., which he will develop and erect a phosphate plant.

The British steamship Sportsman finished discharging a cargo of pyrites at Pensacola, Fla., last week and sailed for Charlotte Harbor, Fla., where she will load a cargo of phosphate rock for Hamburg.

Shipments of South Carolina rock for the fiscal year ending August 31 were as follows: From Charleston 355,165 tons and Beaufort 125,911 tons, making a total of 481,076 tons for the year, of which 87,870 tons were foreign and 393,206 tons domestic.

The schooner Sarah E. Ward cleared last week from Charleston, S. C., with 834 tons of phosphate rock for Baltimore, and the schooner Jose Olaverri for New York with 292 tons. The total domestic shipments from Charleston from September 1 to 8 aggregated 1756 tons.

Rich deposits of phosphate rock are said to have been discovered recently at Richmond, Tenn., said to be fully equal to those at Mount Pleasant, Tenn. It is thought that a branch line will soon be built by the Nashville & Chattanooga Railroad from Shelbyville to Richmond.

About fifty miners commenced mining phosphate rock last week on the Bailey place at Spring Hill, Tenn., which was recently purchased by Swift & Co. of Chicago for \$52,000. The force now at work will be increased to 300 men as rapidly as hands can be secured.

Mr. T. A. Carroll, formerly connected with the Florida Fertilizer Manufacturing Co., has severed his connection with that company and has organized a new company, to be known as the Gainesville Fertilizer Works of Gainesville, Fla. Mr. Carroll will be the manager of the new company.

From the Tennessee phosphate field 111,477 tons were shipped, of which 101,255 tons went to foreign ports and 10,222 to domestic ports. North Carolina shipped 13,750 tons, all domestic. The grand total of shipments from all sections of the Southern phosphate belt in 1898-99 aggregated 1,382,473 tons.

It was reported in Columbia, Tenn., last week that the International Phosphate Co. had sold its plant and phosphate mines in Maury county to the Tennessee Phosphate Co., in which Eastern capital is largely represented, and that the deal will soon be consummated. The Tennessee Phosphate Co. recently borrowed \$1,000,000 with the understanding that the larger part of the amount was to be spent in mining Maury county phosphate lands.

The sales of fertilizers in the State of Georgia for the fiscal year of 1898-99 aggregated 320,000 tons, against 425,000 tons last year. Savannah's shipments of fertilizers for 1898-99 were distributed as follows: Central of Georgia Railway, 68,898 tons; Georgia & Alabama Railway, 11,040 tons; Plant system, 11,689 tons; Florida Central & Peninsular Railway, 1400 tons; Savannah River Boat Line, 3000 tons, making a total of 96,027 tons, against 99,930 tons in 1897-98.

With the general prosperity in all Southern industries during the past year that of phosphate has developed an immense volume of business. Prices have scored a sharp advance during the year, being quoted in September, 1898, at 7½s. 8d. abroad, and now strong at 9½s. abroad. The total shipments of Florida phosphate rock from all ports for the fiscal year ending August 31, 1899, aggregated 776,170 tons, of which 615,953 tons were foreign and 160,217 tons were domestic.

CONSTRUCTION DEPARTMENT.

THE MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with every one interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in a town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and it is often advisable to add the names of one or more incorporators as an aid to the postmaster in delivering mail.

ALABAMA.

Anniston—Dumping-car Plant.—The Ingoldsby Automatic Car Co. has been incorporated, with Mr. Swift of St. Louis, president; F. L. Ingoldsby, vice-president, and C. H. Meyer, treasurer, for the purpose of manufacturing patent dumping car of F. L. Ingoldsby; capacity of car is 80,000 pounds.

Bessemer—Iron Foundry and Machine Shops.—The Bessemer Foundry & Machine Co. has been incorporated, with an authorized capital of \$40,000, by Louis Hoster, H. F. Mundes and R. Wegelin, to conduct general foundry and machine shops; main building will be 90x170 feet, pattern shop 40x60 feet. Address Louis Hoster, president and treasurer.

Birmingham—Land Company.—W. T. Underwood, James J. Garrett and S. E. Thompson have incorporated the Ensley Heights Land Co., with a capital stock of \$200,000.

Birmingham—Radiator Works, etc.—The North Birmingham Land Co. will increase its capital stock from \$600,000 to \$1,200,000. At a recent meeting E. N. Cullom was elected president, and will push the work of development. It is reported that the American Radiator Co. of Chicago has decided to locate a plant on the lands of this company.

Birmingham—Cast-Iron Pipe Works.—The Dimmick Pipe Co. has been organized, with a capital stock of \$175,000, by D. R. P. Dimmick of Anniston, Ala., president, and C. Blair secretary; company proposes the erection of a 100-ton cast-iron pipe plant to cost about \$150,000 and to employ about 250 operatives in or near Birmingham. Among others interested are James Bowron and P. G. Shook of the Tennessee Coal, Iron & Railroad Co.

Birmingham—Electric-power Plant, etc.—The Birmingham Railway & Electric Co. and the Birmingham Traction Co. have consolidated and will expend \$500,000 in improvements.

Cardiff—Coal Mines, Coke Ovens, etc.—Thomas McIlheran and C. C. Vaughan have incorporated the McIlheran Mining & Manufacturing Co., with a capital stock of \$25,000, for the purpose of opening mines, building coke ovens, mining and manufacturing iron.

Florence—Electric-light Plant.—Capt. R. T. Simpson has made a proposition to the

city for the establishment of an electric-light plant.

Huntsville—Saw Mill.—B. A. Lewis of Fayetteville will establish a band-saw mill at Huntsville, with all other machinery necessary to manufacture finished lumber of all kinds and grades.

Piedmont—Mineral-land Development.—J. D. Lacy & Co. of Chicago have purchased and will develop large tract of mineral land near Piedmont.

Piedmont—Lead and Silver Mines.—The New York parties recently reported as having purchased lead and silver property near Piedmont have organized the Export Mining Co., with a capital stock of \$100,000, for the purpose of developing it. E. D. McClelen will be local manager. The New York address of the company is 35 Nassau street.

Piedmont—Mineral-land Development.—E. D. McClelen is developing a large tract of mineral land near Piedmont for Tennessee parties, and will also, with B. F. Amington, begin the development of a large copper property.

Piedmont—Iron-ore Mines.—J. H. Mountain has sold the Wilson's Ridge property of 525 acres near Piedmont to Chicago parties, who will develop it and erect a washer at once.

Pratt City—Coke Ovens.—The Tennessee Coal, Iron & Railroad Co., Birmingham, Ala., is preparing to increase its production of coke at Pratt City by the erection of 300 additional ovens.

Selma—Cotton Mill.—The Estelle Cotton Mill Co. has been organized and purchased the Selma (Ala.) Cotton Mill Co., which now has 5000 spindles and 144 looms, which will be increased to 10,000 spindles. Dr. O. F. Cawthon is president; J. W. Cawthon, vice-president; R. H. Mabry, secretary and treasurer.

Uniontown—Electric-light Plant.—The city has awarded contract for erection of its electric-light plant recently mentioned; cost \$14,000. Address "The Mayor."

ARKANSAS.

Fayetteville.—Chartered: International School of Mental Science and Magnetism, by John C. Gibson and others, with capital of \$2500.

Morrilton—Cotton Gin.—The Moose Gin Co. has been incorporated, with a capital stock of \$10,000 and C. C. Burrow, president; Thomas Fletcher, vice-president; Jas. S. Moose, secretary, and Jos. W. Massey, treasurer.

Paragould—Woodworking Factory.—The Hub (Timber) Manufacturing Co. has been incorporated, with Eli Meiser, president; J. B. Avera, vice-president; T. B. Kitchens, secretary and treasurer, for the manufacture of lumber, hubs, spokes, axles, etc.; capital stock \$10,000.

Yellville—Mining.—The North Arkansas Mining & Smelting Co. has been incorporated, with a capital stock of \$50,000, by W. W. Knight, J. H. Barnes, A. C. Sweet, E. G. E. Jaccard, J. W. King and others.

FLORIDA.

Bartow—Rice Mill.—H. T. Dial will establish a rice mill, with capacity of 350 to 500 pounds of cleaned rice per hour; contract for machinery awarded.

Bronson—Saw Mill.—George S. Baxter & Co. of Jacksonville, Fla., have purchased several thousand acres of land near Bronson, and will erect extensive saw mill.

Gainesville—Fertilizer Factory.—The Gainesville Fertilizer Works has been organized for the purpose of manufacturing high-grade fertilizers and dealing in all kinds of fertilizer material; T. A. Carroll, manager.

Jacksonville—Street Paving.—Duval street, from Market street to the new viaduct over the Atlantic, Valdosta & Western Railroad Co.'s tracks, is to be paved at once with Volusia shell; also certain streets in western part of city; city engineer has prepared estimates on the cost of paving certain streets (6232 lineal feet, sixteen feet wide) with cypress curbing and Volusia shell. Address "Board of Public Works."

Lake City—Ginnery, etc.—The Brick Ginnery Co. has been formed for operating the ginnery and plant of A. B. Hart; company will gin cotton and make a specialty of supplies needed by ginneries.

Tallahassee—Electric-light Plant.—The city will hold an election on October 10 to decide the issuance of \$16,000 of bonds for

the establishment of an electric-light plant. Address "The Mayor."

GEORGIA.

Atlanta—Publishing.—W. A. Hemphill, Clark Howell, H. T. Inman and others have incorporated, with a capital stock of \$650,000, the Constitution Publishing Co. to continue the publication of the Constitution.

Augusta—Planing Mill.—The Perkins Manufacturing Co. has purchased additional machinery to increase the capacity of its planing mill.

Augusta—Machine Works.—The Georgia Iron Works has installed additional machinery for doubling its capacity.

Auraria—Gold Mines.—Capt. O. C. Scuplin is making extensive improvements in the Betz mine near Auraria. The mill has been enlarged, blacksmith and machine shops enlarged and a concentrating plant added, doubling the capacity of the plant.

Carrollton—Cotton Mill.—The company previously reported as being formed by L. C. Mandeville and associates for the erection of a cotton mill has been incorporated as the Mandeville Cotton Mills, with a capital stock of \$100,000. Others interested are G. H. West, S. Holderness, B. E. Bass and B. F. Rigby.

Cedartown—Coal Mines, Iron Furnaces, Coke Ovens, etc.—The Georgia & Alabama Iron Co. (lately reported as having been organized by Rogers, Brown & Co. of New York city and Eugene Zimmerman of Cincinnati) has completed purchase of coal and iron properties, iron furnaces, etc., in and around Cedartown, will repair and put in blast the Cherokee furnace; when this furnace is in operation a new 200-ton furnace will be built. The company will also build a large number of coke ovens.

Cleveland—Gold Mines.—Sheldon, Danforth & Shall have purchased the Longstreet property of 750 acres near Cleveland and will remove their mining plant from Gainesville, Ga., to develop it.

Columbus—Coffin Factory.—Investigations are being made by a party desirous of locating a coffin factory in Columbus. Address Mayor Chappell.

Columbus—Pants and Overall Factory.—J. S. Montgomery and others, lately reported as having secured building and to install machinery for manufacture of pants, overalls, etc., have formed the Union Clothing Manufacturing Co.; office in Kyle Building.

Columbus—Wharf.—The city will probably appropriate \$4000 for building and repairing present city wharf with stone. Address "The Mayor."

Macon—Cooperage.—The Macon Cooperage Co., Roush Bros., proprietors, will rebuild plant reported burned; loss on plant \$10,000.

Macon—Saw Mill.—H. B. Erminger, C. W. Kirby and W. E. James have incorporated the Oakfield Lumber Co. for the erection and operation of saw mills, etc.; capital stock \$10,000, with privilege of increasing to \$50,000.

Macon—Lumber Company.—The Red Cypress Lumber Co. has been incorporated by E. A. Hallam, W. W. Hallam and J. T. Wright, with a capital stock of \$50,000, with privilege of increasing to \$200,000.

Milledgeville—Electric-power Plant.—The company reported last week as being formed by J. F. Wilson and associates for the development of the Fruman Shoals property proposes to develop 5000 horse-power and transmit it to factories. Incorporated as the Oconee Electric & Power Co., with a capital stock of \$50,000, by J. A. Horne, Samuel Evans, L. H. Andrews, L. C. Hall and others.

Moultrie—Saw Mill.—The Union Lumber Co. is erecting a saw mill near Moultrie with a capacity of between 75,000 and 100,000 feet per day, and will erect another mill with a still larger capacity.

Savannah—Drug Company.—J. M. Solomons and Isaac A. Solomons have incorporated as the Solomons Co., with capital stock of \$75,000, to continue the drug business formerly conducted by Solomons & Co.

KENTUCKY.

Earlington—Telephone System.—J. T. Alexander and the North Electric Co. of Cleveland, Ohio, have petitioned the city council for franchise for establishment of telephone system in Earlington and Madisonville.

Louisville—Distillery.—John Lemmon, John H. Dewitt and others have incorporated the Knights of the Royal Arch Dis-

tributing & Distilling Co., with a capital stock of \$1,000,000, for the purpose of operating a distillery.

Middlesborough—Steel Plant.—The Virginia Iron, Coal & Coke Co., Welton Graham, general superintendent, Bristol, Va.-Tenn., will repair and put in operation its basic open-hearth steel plant at Middlesborough, as lately reported.

Owensboro—Street Improvements.—The city will hold an election in November to decide the issuance of \$200,000 in bonds for street improvements. Address "The Mayor."

Owenton—Water Works.—The Owenton Water Works Co. has been incorporated, with a capital stock of \$5000, by William Lindsay, W. B. Swope and others.

Paducah—Heading Factory.—J. L. Kilgore & Co. are making addition to their heading factory.

Paducah—Stave and Heading Factory.—T. C. Seaman & Son are enlarging their stave and heading plant.

Paducah—Machine Shops.—The capacity of the Jackson Machine Shops is being increased.

Paducah—Saddlery.—The E. Rehkoph Saddlery Co. (reported several months ago as incorporated) is increasing its capacity.

Paducah—Brewery.—F. C. Shoenhaler, David Shoenhaler, F. C. Shoenhaler, Jr., each of Chicago, Ill.; W. F. Paxton and Geo. H. Dains of Paducah have incorporated the Paducah Brewing Association, with a capital stock of \$125,000, for the establishment of a brewery.

Pikeville—Lumber Company.—The White Oak Lumber Co. has been incorporated by Jeff Davis and others.

Pineville—Coal Mines.—The Pineville Coal Co. will develop new coal mines on its property.

Russellville—Asphalt Mines.—W. F. Browder has purchased for a Louisville (Ky.) syndicate the Logan county asphalt mines for \$33,000; extensive developments will be commenced at once.

LOUISIANA.

Breaux Bridge—Cotton-oil Mill.—The erection of a cottonseed-oil mill with daily capacity of ten tons is probable. Jos. Pellerin can give information.*

Clinton—Cotton Mill.—It is reported that a deal has been closed for the establishment of a 2000-spindle yarn mill. Names of interested parties will be announced later.

Millersville (P. O. at Whitehouse)—Irrigation Company.—L. E. Littell, Dennis Miller, Philip Miller, L. E. Bellome and others have incorporated the Millersville Irrigation Co., Limited, for the construction and operation of irrigation plants, construction of wharves, warehouses, etc.; capital stock \$20,000.

Minden—Saw Mill, etc.—Zack Martin will rebuild his saw mill, grist mill and gunnery, recently reported burned; saw mill to have capacity for 25,000 to 30,000 feet per day.*

New Iberia—Electric Plant, Water Works, Canal and School.—The city has decided by popular vote to issue bonds and levy a special tax amounting to \$110,000 for erection of electric plant, industrial school, construction of water works and the canal reported during the week. Address "The Mayor."

New Orleans—Cotton Compress.—John F. Clark, John Hogan, W. B. Murphy and others have incorporated the New Orleans Compress & Warehouse Co., Limited, for the purpose of compressing and storing cotton, etc.; capital stock \$5000.

New Orleans—Cotton Mill, etc.—Louis Kohlman has leased the old Semmes & Parker mill building and will improve it as a cotton mill at a cost of \$4500, as reported last week; he also contemplates adding a knitting mill.

New Orleans—Drug Company.—M. Dracos Dimitry, Joseph A. McCaleb, Arthur B. Leopold and others have incorporated the Aug. C. Freitag Company, Limited, to conduct a general drug business; capital stock \$10,000.

New Orleans—Mercantile.—H. H. Daniel, J. E. Richard, Charles H. Hamilton and others have incorporated the Daniel & Richard Co., Limited, to conduct a merchandise business; capital stock \$40,000.

Rochelle—Saw Mill.—The W. M. Gunton Lumber Co., Limited, has been incorporated by W. M. Gunton, Waverly Whitaker, Thos. M. McGill, P. W. Huston and W. L. Whitaker, all of Chicago, with a capital stock of

\$150,000; company has purchased large tracts of timber lands in Grant parish, also a saw mill at Rochelle which it will operate.

St. Francisville—Cotton Mill.—The stock company lately reported as to be organized for erection of cotton mill will have a capital stock of \$50,000. Address for information J. P. Bowman.

MARYLAND.

Baltimore—Lumber Mill.—Richard Cromwell, Jr., Charles Hammond Cromwell, John J. Duffy, Charles W. Belt and Martin J. S. Cromwell have incorporated the Lafayette Mill & Lumber Co., with a capital stock of \$2500.

Baltimore—Commission Company.—George W. Orem, Jr., Oscar Clifford Orem, Wilbur F. Jackson and others have incorporated the Orem Commission Co., with a capital stock of \$25,000.

Baltimore—Chemical Company.—Chartered: The Kashora Chemical Co., with an authorized capital of \$50,000, by Edward Lipps and others to manufacture chemicals, soaps, drugs, etc.

Washington, D. C.—Chartered: The American Multiplex Talking Machine, with a capital stock of \$5,000,000, by A. J. Oesteria, A. Wortman, E. D. Alsille of New York city, J. M. Wiley, H. O. Baker of Washington.

Cumberland—Tinplate Mill, etc.—The improvements reported several months ago as contemplated by the Cumberland Steel & Tinplate Co. include the erection of a new plate mill building (excavation for which has been completed), in which will be installed a 1500-horse-power engine and a new train of rolls; it will be 250x70 feet, and will include four 26-inch hot mills and two 22-inch cold mills; there will also be a large annealing furnace forty feet long and a large pickling machine; addition will employ 300 operatives.

Cumberland—Business Building.—Hagib & Stegmaler, 9 N. Center street, will erect a three-story brick building.*

McKendree—Hospital Building.—The board of directors of the Miners' Hospital No. 2 has accepted the plans of George Henneman of Charleston and Yost & Packard of Columbus, Ohio, for its proposed building; cost of building to be \$12,000.

Salisbury—Corn and Flour Mill.—Phillips & Mitchell have awarded contract for erection of 50-barrel flour and corn mill.

MISSISSIPPI.

Bay St. Louis—Electric-light Plant.—The Gulf Coast Ice & Manufacturing Co., if successful in its bid for lighting the city, will install an entirely new electrical equipment costing several thousand dollars.

Bentonla—Cotton Gin.—The Bentonla Gin Co. has been incorporated, with a capital stock of \$7000, by R. M. Whitehead, E. F. Gaddis, Frank Hart and others.

Clarksdale—Electric-light Plant, Sewerage System and Water Works.—The city has decided by popular vote to issue the \$37,000 of bonds for construction of electric plant, water works and sewerage system, previously mentioned. Address Walter Clark, mayor.

Columbus—Cotton Mill.—T. O. Burris contemplates the organization of a stock company for the establishment of a cotton mill.

Ellisville—Dry-kilns and Planing Mill.—The Ellisville Lumber Co., Mulford Parker, manager, will rebuild its dry-kilns, reported burned, and also intends putting in additional planing machines.

Flora—Cotton Gin.—Frank Hart, T. F. Hutchinson, F. J. Jiggetts and others have incorporated the Flora Gin Co., with a capital stock of \$10,000.

Greenwood—Water Works and Sewerage System.—The city will issue \$50,000 of bonds for construction of water works and sewerage system. Address "The Mayor."

Jackson—Cotton Mill.—The People's Textile Co. will be organized, with a capital stock of \$100,000, for erection of a cotton mill.

Jackson—Sewers.—Contract for constructing the proposed sewerage system has been awarded to Ford, Delahunt & Yeater of Cedar Rapids, Iowa, for \$89,000.

Meridian—Lumber Manufacturing.—J. H. Culpepper, E. A. Spinks, M. C. Conant, C. M. Spinks and others have incorporated the Capital Lumber Co. for the purpose of conducting a general lumber-manufacturing and trading business; capital stock \$25,000.

Nettleton—Saw Mill.—James Randolph will erect a saw mill and probably rebuild his burned ginney.

Nettleton—Saw Mill.—Mark Shimpert has purchased and will operate the Holt saw mill; capacity 20,000 feet per day.

Pocahontas—Cotton Gin.—The Pocahontas Gin Co. has been incorporated, with a capital stock of \$8000, by E. K. Middleton, T. F. Hutchinson and Frank Hart.

Sardis—Water Works.—P. T. Porter of Louisville, Ky., has received contract at \$15,000 for construction of water works recently mentioned.

Vicksburg—Cotton Mill.—W. H. Fitzhugh, A. Rose, W. S. Jones, P. M. Harding, B. W. Griffith and J. D. Laughlin are among those interested in the formation of the stock company for the erection of cotton mill lately mentioned.

Vicksburg—Saw Mill and Box Factory.—Anderson & Tully of Memphis, Tenn., have purchased for \$30,000 the saw mill of C. F. Streight, located at Lake Centennial. The mill has a capacity of 100,000 feet of lumber per day, which will be largely increased and a box factory built in connection.

Vicksburg—Stone Quarry.—The Rankin Stone Co. has been incorporated to quarry rock by Lee Richardson, W. L. Smith and Edwin Ford; capital stock \$5000.

Winona—Stave and Lumber Mill.—The Gerdes Stave Co. has been incorporated to manufacture staves and lumber; capital stock \$15,000.

MISSOURI.

Aurora—Lead and Zinc Mines.—The Grier Land Co. has been incorporated, with a capital stock of \$50,000, by G. W. Wall, W. K. Murphy, M. T. Davis and others.

Bass—Mercantile.—Chartered: The Bass Mercantile Co. has been incorporated by G. C. Fowler, F. L. Fowler and others, with a capital stock of \$4200.

Bolivar—Medicine Factory.—Chartered: The Great Foust Remedy Co., for manufacturing proprietary medicines, by A. J. Hunter, C. E. Zumwalt, E. F. Hunter and others; capital stock \$5000.

Carthage—Lead and Zinc Mines.—The Oakland Mining & Milling Co. has been incorporated to operate the Hawkeye lead and zinc properties near Carthage purchased from Iowa parties; capital stock \$105,000; W. D. Leeper of Chillicothe, president; J. R. Lyle of Shelbyville, vice-president; W. E. McCully of Macon, secretary and general manager; general office of company Wardell Building, Macon, Mo.

Granby—Lead and Zinc Mines.—The Morning Glory Mining & Milling Co. (reported as incorporated last week under Neosho, Mo.) has organized for the purpose of developing and working mines owned near Granby; company is negotiating for 100-ton concentrating plant to cost about \$8000; capacity of mines 100 tons of zinc ore ready for market per week; J. H. Hughes, Neosho, Mo., secretary.

Independence—Implement Factory.—Roberts Bros. (Preston and William Roberts) will establish a plant for the manufacture of their patent cultivators. H. F. Wille of Lexington, Mo., will be superintendent.

Joplin—Investment Company.—The Carter Investment Co. has been incorporated, with a capital stock of \$20,000, by W. M. Carter, C. L. Carter, O. W. Carter and others.

Joplin—Lead and Zinc Mines.—The company reported last week as being organized for the purchase of the Kohinoor tract of 200 acres at Joplin will be known as the Continental Zinc & Lead Mining & Smelting Co. The directors include Ernest Thalmann of New York, president; Alvin W. Ketch and W. A. Underwood of New York; A. D. McClellan, W. E. Barrett and Charles Hayden of Boston, and Capt. S. P. Snider of Minneapolis, Minn.

Joplin—Lead and Zinc Mines.—J. C. Molloy will install machinery for developing the old Combination mines.

Joplin—Lead and Zinc Mines.—H. H. Beckwith and Henry Gilbert, owners of the Marguerite mine, will rebuild their mill recently burned.

Joplin—Lead and Zinc Mines.—Chartered: The Elwood Mining Co., with a capital stock of \$80,000, by W. S. Crane, J. R. Bolton, S. T. Gilpin and others.

Joplin—Lead and Zinc Mines.—The Bates Zinc Mining Co. has been incorporated, with a capital stock of \$10,000, by G. H. Copeland, A. W. Thurman and W. E. Welch.

Kansas City—Mining and Smelting Company.—Chartered: The North Arkansas Mining & Smelting Co., with a capital stock of \$50,000, by W. W. Knight, J. P. Barnes, A. C. Sweet and others.

Kansas City—Telephone Improvements.—The Missouri & Kansas Telephone Co. will increase its capital stock from \$1,250,000 to \$2,500,000 for the purpose of making extensive improvements; \$150,000 will be expended in putting its wires under ground.

Kansas City—Elevator.—T. J. Brodnax, J. A. McLinery and John I. Glover have incor-

porated the Memphis Elevator Co., with a capital stock of \$2000.

Kansas City—Chartered: The Boston-Kansas City Cattle Loan Co., with a capital stock of \$100,000, by T. H. Beckman, J. W. Swain, J. W. Hill and others.

Kansas City—Medicine Factory.—The Moore Medicine Co., recently reported as incorporated, has a medicine factory already in operation.

McComb City—Cotton Mill.—Efforts are being made to organize a stock company for erection of a cotton mill. Address Capt. J. J. White or T. W. James.

Mexico—Fire-brick Plant.—St. Louis capitalists will, it is reported, establish a \$250,000 fire-brick plant in Mexico; this includes the removal of the fire-brick plant at Valladolid to Mexico; \$20,000 has already been subscribed. Address Cuthbert Dixon.

Savannah—Mercantile.—J. O. Pearce, G. D. Crowley, Frank M. Richardson and John Allen have incorporated the Savannah Mercantile Co., with a capital stock of \$12,000.

St. Louis—Bedding and Upholstering Company.—The Evans-Bergin Bedding & Upholstering Co. has been incorporated, with a capital stock of \$12,000, by F. X. Bergin, August Gehner and others.

St. Louis—Building Company.—Alexander A. Fischer, T. O. Rutledge and others have incorporated the A. A. Fischer Architectural & Building Co., with a capital stock of \$10,000.

St. Louis—Lead and Zinc Mining.—Chartered: The Elkhorn Lead & Zinc Co., with a capital stock of \$3200, by C. H. Hamline, D. J. Waugh and others.

St. Louis—Lead and Zinc Mines.—The Elkhorn Lead & Zinc Co. has been incorporated, to conduct a general mining business, by F. L. Yale and C. H. Hamlin.

St. Louis—Candy Factory.—F. M. Switzer, L. Runtz, J. C. Goodyear and others have incorporated the Missouri Candy Co., with a capital stock of \$12,000.

St. Louis—Lead and Zinc Mines.—A. W. DeGraff, S. C. Walker of Purdy, G. H. Martin, B. R. Lewis of St. Louis and others have incorporated the La Touraine Land & Mining Co., with a capital stock of \$20,000.

St. Louis.—Chartered: The Architects' Cabinet & Card File Co., with a capital stock of \$2000, by William L. King, Ben W. Lewis and W. Frank Carter.

St. Louis—Electric Company.—Scott Van Etten, Harry E. Lyons, Amy Carter and Arthur B. Donnelly have incorporated the Van Etten-Lyons Electric Co., with a capital stock of \$5000.

Webb City—Lead and Zinc Mines.—The Mary S. Lead & Zinc Mining Co. has been incorporated (as recently reported) for the development of lead and zinc mines; capacity of its concentrating plant is 100 tons in ten hours.

Webb City—Lead and Zinc Mines.—The Gray Eagle Lead & Zinc Mining Co. has been incorporated, with a capital stock of \$50,000, by W. H. Dangle, C. A. Covert, Edward Smallhouse and others.

NORTH CAROLINA.

Charlotte—Saw and Planing Mill.—The Piedmont Lumber Co. is being formed for the purpose of erecting a band-saw mill, also planing mill, to manufacture rough and dressed lumber; capacity will be from 25,000 to 35,000 feet per day.*

Fayetteville—Silk Mill.—The Ashley & Bailey Co., 109 and 111 Spring street, New York, N. Y., has purchased site in Fayetteville, as previously reported, and will establish an experimental silk mill.

Graham—Overall and Pants Factory.—L. Banks Holt is erecting a new building for his pants and overall factory.

Hickory—Cotton Mill.—E. L. Shuford is negotiating for the purchase of Rowe Shoals, and if successful will establish a cotton mill.

High Point—Cotton Mill.—It is reported that \$80,000 has been subscribed towards the erection of a \$100,000 cotton mill. Address "Secretary Business Men's Association."

Kings Mountain—Cotton Mill.—The Lula Manufacturing Co. (recently reported as incorporated) will erect a one-story mill building 78x224 feet and install 2500 spindles at first, increasing to 5000 spindles later on. The capital stock of \$50,000 will be increased to \$100,000; R. S. Baker, president.

Kinston—Warehouse.—The Kinston Warehouse Co. has been incorporated to conduct a general storage business by Lemuel Harvey, A. Mitchell, C. F. Kennedy, C. Felix Harvey and others; capital stock \$2500.

Mitchell County—Timber and Mineral Lands.—A. D. Reynolds of Bristol, Tenn., has purchased 67,000 acres of timber and

mineral lands in Mitchell county from the Roan Mountain Iron & Steel Co.

New Berne—Fertilizer Factory, etc.—The New Berne Cotton Oil and Fertilizer Mills has increased the size of its plant, and will erect a fertilizer factory this fall, as reported last week; capacity of new factory to be seventy-five tons per day.

Raleigh—Lumber Mill.—A report from Raleigh states that John R. Cochran of D. N. Stanton & Sons, Broadway, New York city, has purchased 1000 acres of timber land, and will manufacture lumber.

Sanford.—The Sanford Cotton Mills (previously reported as incorporated, etc.) is laying the foundation for its mill, which will have a capacity for 10,000 spindles and 500 looms; will start with \$100,000 capital, 5000 spindles and 250 looms, and expects to increase to \$200,000 capital and 10,000 spindles later on; T. L. Chisholm, manager.

Wadesboro—Electric-light Plant and Water Works.—It has been decided by popular vote to issue \$25,000 of bonds for electric-light plant and water works, recently reported. Address "The Mayor."

Waynesville—Tobacco Factory.—A tobacco factory with capacity of 500 to 1000 pounds per day is contemplated. Address M. L. Holcombe.*

Wilmington—Cotton Compress.—Alexander Sprunt & Son, proprietors of the Champion Compress, have installed new machinery and increased the capacity of their plant to 4000 bales of cotton per day; shops have also been established in connection with the compress for making cotton trucks, shears and other tools and necessary implements, stencils, etc.

Wilmington—Telephone System.—The Interstate Telephone Co. contemplates the construction of a line to Lumberton in the near future.

Wilson's Mills—Cotton Mill.—The Anthony Cotton Mills has been organized for the erection of a small yarn mill.*

Winston-Salem—Gold Mines.—It is reported that David Brown has discovered and will develop gold deposits on his property.

Wyo—Gold Mines.—Thomas Dixon has, it is reported, discovered gold deposits, and will develop.

SOUTH CAROLINA.

Charleston—Electric-power Plant.—The Charleston Consolidated Railway Co. has had plans prepared by A. W. Todd for its proposed \$150,000 electric-power plant, which will be of brick and stone, 132x700 feet. Contract for the electrical apparatus has been awarded. The engines, which will consist of 500 horse-power, two 350 horse-power and two 225 horse-power, aggregating, with the ones now in service, 3100 horse-power. Bids for construction of building have been invited, and contract will be awarded in a few days.

Charleston—Electrical Construction Company.—The Charleston Electrical Construction Co. has been incorporated, with a capital stock of \$7500, by Charles F. Middleton, J. Lamb Perry, Wm. H. Jones, John E. Torbert and George E. Hazelhurst.

Fork Shoals—Cotton Mills.—C. D. Nesbitt & Son (proprietors of the old Oak Lawn Cotton Mills) contemplate the organization of a stock company to enlarge their plant and develop the water-power property to its fullest extent.

Georgetown—Saw Mills, etc.—The Atlantic Coast Lumber Co. will make extensive improvements at Georgetown, including the erection of saw mills with capacity of from 300,000 to 400,000 feet a day, a wharf 1600x64 feet on Sampit river, hotel, office buildings, stores, warehouses and a number of dwellings; W. T. Sears, superintendent.

Greenville—Electric-power Plant, etc.—The Greenville Traction Co. has been incorporated, with a minimum capital of \$200,000, maximum \$1,500,000, by the officers of the National Gas & Construction Co. of Philadelphia, Pa., to operate a system of electric railway in Greenville; this company purchased the gas works and electric-light plant of the Greenville Gas & Electric Light Co., as recently reported, and will continue to operate it under the old charter and name. These plants are all owned and controlled by the National Gas & Construction Co., James H. Dawes, superintendent.

Hickory—Cotton Mill.—Efforts are being made for the organization of a company to build a \$50,000 cotton mill. R. M. Carroll of Blairsville, S. C., or Col. J. R. Ashe of Yorkville, S. C., can be addressed.

Maynard—Pottery.—B. A. Green and L. T. Wimpey contemplate the establishment of a pottery.

Pelzer—Laundry.—G. E. Marchbanks, J. E. Carter, T. M. Jenkins and I. J. Phillips

have incorporated the Pelzer Steam Laundry Co., with a capital stock of \$2500.

Pendleton—Cotton Gln.—The Pendleton Ginning Co., lately reported as incorporated, has a plant already in operation; J. J. Sutton, secretary-treasurer.

Sumter.—Electric-light Plant and Ice Factory.—The Sumter electric-light plant has been purchased for \$10,000 by R. O. Purdy, representing the bondholders, C. T. Mason and R. M. Wallace, who will operate the plant and consolidate with it their ice factory, installing a new 30-ton ice machine to increase the output.

TENNESSEE.

Bluff City—Zinc Mines.—James S. Baxter of Pulaski, Va., has discovered zinc deposits on the property of B. W. Norvell and Robert Deery at Bluff City, and will organize a company to develop it.

Chattanooga—Bedstead & Manufacturing Co. contemplates increasing the capacity of its factory.

Chattanooga—Iron Foundry.—The Southern Malleable Iron Co. will erect two additional furnaces at a cost of \$5000 to increase the capacity of its plant.

Chattanooga—Tile Works.—Mr. Welch, foreman of the Tennessee Pottery Works, has leased the old Lookout rolling mills, and will equip it as a tile factory.

Chattanooga—Iron Furnace.—The Chattanooga Furnace Co., previously reported as having purchased the old Chattanooga furnace, has completed repairs and started operations, with a capacity of over 100 tons daily.

Chattanooga—Electric-power Plant.—The narrow-gauge railroad company, operating on Lookout mountain, J. T. Crass, president, will erect an electric-power plant.

McDearman—Flour Mill.—W. C. Terry has awarded contract for erection of a 40-barrel flour mill.

Petros—Coal Mines.—George P. Howard of Atlanta, Ga., has purchased the entire mines and property of the Crooked Fork Coal Co. at Petros, as lately reported, and will double or treble the present output of ten to fifteen cars per day; company controls about 2000 acres of coal lands.

Sequatchie—Handle Factory.—The Sequatchie Handle Co. (reported last week under Jasper as incorporated) will erect a handle factory, with capacity of 300 to 400 dozen hickory handles per day; John M. Messick, manager.

TEXAS.

Austin—Gas Company.—Robert G. West, Thomas B. Cochran of Austin, Henry Lehr, Doylestown, Pa., Arthur Heurtley, Chicago, Ill., and others have incorporated the Austin Gas Co. to manufacture, supply and sell gas for heat, light and power; capital stock \$150,000.

Beaumont—Ice Factory.—The Beaumont Ice, Light & Refrigerating Co. will erect a 20-ton ice factory (as reported last week) to cost about \$20,000, in addition to its present plant; J. C. Ward, president.

Calvert—Gin and Oil Company.—The Ginnison Gin & Oil Co. has been incorporated, with a capital stock of \$100,000.

Colorado—Publishing.—Chartered: The Stockman Publishing Co., with a capital stock of \$4000, by F. M. Ralke, M. W. Raley, B. L. Gill and others.

Colorado—Opera-house.—Chartered: The Colorado Opera House Co., with a capital stock of \$4000, by C. M. Adams, H. C. Townsend, H. B. Smoot and others.

Corsicana—Sewerage System.—The city has been petitioned to extend its sewerage system. Address "The Mayor."

Corsicana—Real-estate Improvement.—The Corsicana West Side Land & Improvement Co. has been incorporated, with George T. Jester, president; S. W. Boggy, secretary; Claude W. Jester, treasurer; capital stock \$20,000.

Dallas—Shoe Factory.—Charles Clerc, A. S. Claiborne and Henry A. Miller have incorporated the Dallas Shoe Manufacturing Co., with a capital stock of \$30,000.

Eagle Pass—Coal Mines.—L. M. Johnson of Mexico, J. Stewart Mackle of New York, William Hollis, C. K. Dunlap and T. G. George have incorporated the Rio Bravo Coal Co. for the development of 3000 acres of coal lands.

El Paso—Copper-smelting Plant.—It is reported that William A. Clark of Montana has organized a \$3,000,000 company for the establishment of a large copper-smelting plant in El Paso.

Greenville—Water Works.—A company has been organized by local capitalists, with W. L. Beckman, president; F. J. Phillips,

vice-president; W. A. Williams, secretary-treasurer, and will apply for franchise for construction of a system of water works; capital stock \$100,000.

Houston—Coal Mines.—The Milby & Dow Coal & Mining Co. has doubled its capital stock, as recently reported, making it \$100,000, for the purpose of opening new coal mines in Arkansas and elsewhere.

Sherman—Ice Factory.—B. L. Fielder is organizing a \$30,000 stock company for establishment of an ice factory; \$20,000 has been subscribed.

Sherman—Ice Factory.—The Sherman Ice Co. will increase capacity of its plant to sixty tons.

Sherman—Cold-storage Plant.—The Sherman Packing Co. is erecting a cold-storage plant.

Sour Lake—Bottling Works.—C. F. Marschner of Galveston, Texas, will establish bottling works at Sour Lake for mineral waters, and will manufacture soda water, ginger ale, etc.

Terrell—Timber and Mercantile Company. F. M. Ralke, M. W. Raley, B. L. Gill and others have incorporated the Texas Timber & Mercantile Co., with a capital stock of \$10,000.

Trinity—Telephone System.—John H. Traylor and J. T. Elliott of Dallas, Texas, and James H. Allen of St. Louis, Mo., have incorporated the Southwestern Texas Telephone Co. for construction of a line from Trinity to Corrigan; work on it has commenced.

Waco—Water Works.—The city will construct a system of water works. Address "The Mayor."

Wills Point—Ginnery.—The Johnson Gin Co., previously reported as incorporated, has a ginnery already in operation; O. L. Johnson, manager.

Wills Point—Water Works.—Efforts are being made for the establishment of a system of water works. Address "The Mayor."

Wills Point—Telephone Exchange.—L. D. Brannon of Commerce is establishing a telephone exchange at Wills Point.

Yoakum.—Chartered: The E. Herder Co., with a capital stock of \$10,000, by E. Herder, E. Bulwer and W. T. Kuesle.

VIRGINIA.

Alexandria—Mining, etc.—The Virginia Plaster & Fertilizer Co. has been incorporated to conduct a general fertilizer and mining business by M. C. Butler, T. W. Buckley, L. T. Mechner of Washington and others; capital stock \$50,000.

Berkley—Knitting Mills, etc.—George W. Simpson of Berkley is president; W. L. Baillie, Jr., of Berkley, secretary and general manager; Samuel M. Simpson of Norfolk, treasurer, of the Berkley Knitting Mills, lately reported as incorporated.

Charlottesville—Ice Factory.—A company has been organized, with a capital stock of \$25,000, for the establishment of an ice factory; N. T. W. Duke, president.

Charlottesville—Ice Factory.—The Citizens' Ice & Manufacturing Co. has been organized, with a capital stock of \$25,000 and R. T. W. Duke, Jr., president; John L. Walters, vice-president; John F. Elliott, general manager; M. C. Elliott, secretary-treasurer.

Clifton Forge—Shoe Company.—The J. N. Merriman Shoe Co. has been incorporated, with a capital stock of \$5000, to deal in boots and shoe; W. L. Wills, J. N. Merriman, B. W. Fontaine and others, incorporators.

Farmville—Telephone System.—W. P. Venable and S. P. Vandersloce, previously reported as to construct telephone system, have incorporated the Farmville Telephone Co., with a capital stock of \$5000.

Goshen—Hotel.—The Alleghany Hotel Co. has been incorporated, with W. G. McCormick of New York, president; James J. Frazier of Rockbridge Alum Springs, Va., vice-president; A. G. Harman, Rockbridge county, secretary; capital stock \$25,000; company purchased and will operate the Alleghany Hotel.

Newport News—Woodworking Factory.—It is reported that a \$500,000 company will be organized for the establishment of a sash, door, blind, etc., factory, site for which has been purchased from the Old Dominion Land Co. B. T. Pillow of Richmond, Va., and J. B. Pierce of New York are interested.

Norfolk—Fertilizer Factory.—Captain Bussels is establishing a fish fertilizer factory at Sandy Island, erecting wharves, dry sheds and process houses.

Norfolk—Manufacturing Plant.—Pennsylvania parties are investigating relative to the removal of a manufacturing plant to

Norfolk; no definite arrangements have been made. Address "Secretary Board of Trade."

Norfolk—Importing and Exporting.—The Eastern & Southern Trading Co. has been incorporated to conduct a general importing and exporting business, with Hippolyte L. Hardy of New York, president; Charles S. Haight of New York, vice-president; Charles R. Hebard of New York, treasurer; these, with Richard L. Edwards, Jr., of New York and J. W. Wilcox of Norfolk, are the directors; minimum capital \$500,000; maximum, \$1,000,000.

Richmond—Shipbuilding Plant.—The W. R. Trigg Shipbuilding Co. proposes to greatly enlarge its plant and erect a large dry-dock.

Richmond—Saw Mill.—F. Sitterding contemplates installing additional machinery.*

Roanoke—Stave Company.—The New River Stave Co. has been incorporated, with J. T. Strickland, president; W. A. Pedigo, secretary-treasurer; capital stock \$5000.

WEST VIRGINIA.

Beverly—Lumber Mill.—S. H. Childs has purchased 1400 acres of timber land on Rich mountain, and will begin manufacturing lumber.

Bluefield—Coal and Coke Company.—The Olympia Coal & Coke Co. has been incorporated, with an authorized capital of \$100,000, by George Hreman of Bluefield, W. S. Kalbreth of Pocahontas, A. M. Johnson of Bramwell and others.

Boone—Flour and Grist Mill.—A. H. Shank contemplates the erection of a roller flour and grist mill.*

Charleston—Lead Mines.—The Arizona Lead Co. has been incorporated, with a capital stock of \$100,000, by John C. Nevel and F. C. Hall of Charleston, M. B. Mullens, J. W. Poling and others.

Charleston—Produce Company.—Chartered: The United Produce Co., with a capital stock of \$1,000,000, by F. L. McGee and others.

Clarksburg—Window-glass Factory.—The Dawson Company has prepared plans and has contract for erecting the window-glass factory of the Lafayette Co-operative Window Glass Co., reported recently as incorporated.

Duffy—Oil and Gas Lands.—The South Side Oil Co. has been incorporated to purchase and operate oil and gas lands by Malcolm S. Murray, Chas. Morris, W. P. Stewart and others; capital stock \$18,000.

Fairmont—Coal Mines, etc.—The George's Creek Coal & Coke Co., whose organization was recently assured and reported as having purchased 6000 acres of coal lands in the Fairmont regions, is now reported as having commenced work on the erection of a large mining plant; excavation is now in progress for a stone power-house 160x50 feet; a large stone and steel powder-house and blacksmith shop are in course of erection. R. L. Somerville of Lonaconing, Md., general superintendent, recently purchased 700 acres of coal land near Fairmont, and is negotiating for 300 or 400 acres more.

Fairmont—Brick, etc., Company.—James Hammond, B. F. Reese, J. M. Berkely, E. R. Hammond and J. B. Hammond have incorporated the Hammond Fire Brick Co. for the purpose of dealing in fire-brick, coke, iron and other minerals; capital stock \$500.

Farmington—Planing Mill.—The Farmington Planing Mill Co. has been incorporated to establish and operate planing mill by David Berry, John Kirk and others, all of Duffy, W. Va.

Louisa—Oil Company.—The Louisa Oil Co. has been incorporated, with a capital stock of \$50,000, by J. H. Northrup, J. P. McCluskey, H. C. Sullivan and others, to conduct a general oil business.

Marlington—Bee-hive Factory.—T. C. Ware of Mill Point will erect a bee-hive factory at Marlington.

Martinsburg—Coal and Coke Company.—Charles B. Shank, Edward B. Shenck of Millersville, Pa.; Joshua C. Smith of Conowingo, Md.; Jonathan Evans of Philadelphia, Pa., and others have incorporated the Welton Coal & Coke Co., with an authorized capital of \$50,000.

Racine—Saw Mill, etc.—W. S. Lewis of Charleston, W. Va., has purchased 30,000 acres of timber lands near Racine and will erect large saw mill to develop it; oak timber will be manufactured into staves and poplar and other varieties be sawed into lumber.

West Virginia—Cement Plant, etc.—Thos. Adams, F. Douglas Heckman, John Kauffeld, John A. Canach and George A. Cook, all of Philadelphia, Pa., have incorporated the Cosmo Portland Cement Co., with an authorized capital of \$500,000 for the purpose of mining, quarrying and boring for

cement rock, limestone and minerals, manufacturing, etc.

Wheeling—Oil and Gas Lands.—The Union Oil & Gas Co. has been incorporated by Joseph J. Benter, E. L. Frame, Frank Harris of Philadelphia, Pa.; James B. Fox of Farmington, W. Va.; John W. Mason of Fairmont, W. Va., and others; capital stock \$1000.

Wheeling—Packet, Barge and Steamboat Company.—Chartered: The Natchez & Bayou Sara Packet Co., with a capital stock of \$100,000, by H. Schmulbach, A. M. Hamilton, J. Crookard and others.

Wheeling—Iron and Wire Works.—The Architectural Iron and Wire Works, reported last week as to enlarge its plant by the manufacture of iron and wire fences and all building construction work, has incorporated with a capital stock of \$5000; will also arrange for the manufacture of iron and brass beds. Address No. 15 Seventeenth street.

Wheeling—Stock-yards Company.—The Union Stock Yards of Wheeling has been incorporated, with an authorized capital of \$100,000, by Lewis Zoeckler, Albert M. Schenck, William G. Bayha and others.

BURNED.

Antietam, Md.—Edgar Flery's flour mill; estimated loss \$10,000.

Bonham, Texas.—M. Irick's cotton gin.

Boston, Ga.—Mallette & McGaughey's saw mill.

Bowling Green, Ky.—A. J. Claypool & Co.'s pork-packing plant; estimated loss \$15,000.

Corsicana, Texas.—The Storey & Lynn's cotton gin; estimated loss \$3000.

Hagerstown, Md.—Delemere Flouring Mills; estimated loss \$8000.

Holden, Mo.—Connor Mill & Elevator Co.'s mill; estimated loss \$20,000.

Hot Springs, N. C.—The Hot Springs Barytes Co.'s plant, owned by Dingee, Wyman & Co. of Lynchburg, Va.; estimated loss \$62,000.

Louisville, Ky.—Bridgeford & Co.'s stove foundry; estimated loss \$200,000.

Louisville, Ky.—Phoenix Tanning Co.'s plant; loss about \$50,000.

Macon, Ga.—The plant of the Macon Cooperage Co., Roush Bros., proprietors; estimated loss \$10,000.

Okdale, La.—Calcasieu River Lumber Co.'s dry-kiln; estimated loss \$1500.

Rockwell, Texas.—Loftland & Deans' glr. house; loss about \$4500.

Rome, Ga.—Rounsaville Bros.' warehouse; estimated loss \$35,000.

Sylvania, Ga.—O. C. Everett's planing mill, grist mill and cotton gin; estimated loss \$4000.

Widom, Texas.—The Honey Grove (Texas) Cotton Oil Co.'s gin; estimated loss \$3500.

Winnboro, La.—J. V. Munn's saw mill; estimated loss \$1000.

Wrightsville, Ga.—O. A. Kennedy's saw mill.

BUILDING NOTES.

Albany, Ga.—Jail.—The county will hold an election on October 19 to decide the issuance of \$15,000 of bonds for erection of new jail. If the election does not carry in favor of bonds a special tax will be levied amounting to \$15,000 which will be expended in erection of this jail. Address county commissioners.

Anulston, Ala.—Dwelling.—Dr. H. D. Barr awarded contract to T. L. Houser & Co. for erection of two-story brick and wood dwelling to cost \$6000.

Augusta, Ga.—Warehouse.—Jackson & O'Connor will erect a large warehouse.

Austin, Texas.—School.—Ledbetter & Watlinger have received contract to erect the new high-school building at a cost of \$42,000.

Baltimore, Md.—Warehouse.—Contract for warehouse (lately reported) for the Maryland Biscuit Co. was awarded to John A. Sheridan.

Birmingham, Ala.—Depot.—The Louisville & Nashville Railroad Co. will enlarge its freight depot at Birmingham; J. G. Metcalfe, general manager, Louisville, Ky.

Bristol, Tenn.—Store Building.—Anson King has awarded contract to Smith & Wilson for the erection of his four-story brick building 61x135 feet.

Charlotte, N. C.—Building.—Mrs. M. A. Osborne contemplates the erection of a \$35,000 building.

Chattanooga, Tenn.—Cottages.—Frank Hutcheson is having plans made for two eight-room cottages to cost \$2500 each.

Cooper, Texas.—Courthouse.—Taylor & Sanguinet of Fort Worth, Texas, have contract at \$34,600 for erection of new courthouse lately reported to be erected by Delta county.

Dickson, Tenn.—Jail.—Contract has been awarded for erection of a \$5400 jail. Address "The Mayor."

Elkridge, Md.—Hall.—A memorial hall will be erected. Address Rev. Francis P. Dooley of St. Augustine's Church.

Fort Valley, Ga.—Mill Building.—The Fort Valley Cotton Mills Co. desires bids for the construction of a brick building 90x272 feet, two stories and basement; specifications furnished by mail.

Georgetown, S. C.—Hotel, etc.—The Atlantic Coast Lumber Co. will build a hotel warehouses, etc.

Greenville, Tenn.—Opera-house.—Contract for proposed opera-house awarded to J. F. Barnes at \$17,160, which price includes the building finished ready for steam heating, plumbing and electrical work.

Harding, W. Va.—Hotel, etc.—William A. Siller of Keyser, W. Va., has received contract to erect store and office building and 25-room hotel at Harding for the Junior (W. Va.) Coal Co.

Indianola, Miss.—Jail.—Supervisors of Sunflower county have advertised for bids to erect a two-story brick jail according to plans and specifications on file. Contract to be awarded on October 2. Address W. P. Gresham, clerk.

Newport News, Va.—Church.—The Washington Avenue Methodist Church has awarded contract for its new edifice to J. H. Brinson of Hampton, Va., for \$19,325.

Pablo Beach, Fla.—Hotel.—Henry M. Flagler will erect, it is reported, a 300-room hotel.

Phoebe, Va.—Bank Building.—The Bank of Phoebe has accepted the plans of J. W. Lee and awarded contract to J. H. Brinkley for the erection of its proposed building.

Roanoke, Va.—Church.—J. J. Garry will receive plans and specifications until December 1 for brick and stone Catholic church with seating capacity for 700; no basement, but furnace and coal rooms 20x25 feet; cost \$25,000.

Statesville, N. C.—Warehouse.—A. A. Colvert awarded contract for erection of brick warehouse 60x125 feet.

Terrell, Texas.—Laundry Building, etc.—John L. Terrell, president board of managers, and J. T. Wilson, superintendent, will receive sealed proposals until September 11 for erection of two-story brick laundry and a three-story brick annex to North Texas Insane Asylum. Plans and specifications may be seen at office of C. A. Gill & Son, Dallas, or at office of the president, board of managers. Certified check for \$300 for the laundry and \$500 for annex is required, made payable to the president. Usual rights reserved.

Washington, D. C.—Buildings.—Permits issued to Fred C. Gleesing to erect a two-story brick store and dwelling, press-brick fronts, hot-water heat, cost \$4550; to Walter T. Weaver to erect two two-story brick dwellings to cost \$5500; to Mrs. Barbara Daly for a two-story press-brick building to cost \$4500; to George Koehler for residence, two-story frame, to cost \$4000; A Goener has prepared plans for an apartment-house for Alonzo O. Bliss, five stories, 68x100 feet, of stone and gray buff brick, elevators, hot-water heat, cold-storage plant and all modern improvements, to cost \$75,000.

RAILROAD CONSTRUCTION.

Railways.

Annapolis, Md.—The Potomac & Severn Railway has been granted the privilege of entering Annapolis and passing through the city to the Naval Academy gate.

Athens, Texas.—Survey has begun on a preliminary line for the extension of the Texas & New Orleans Railway from Athens in the direction of Rusk or Jacksonville.

Atlanta, Ga.—A survey has been ordered for a belt line touching the different railroads entering Atlanta to permit the transfer of freight cars around the city instead of through its business portions, as at present.

Atlanta, Ga.—The charter of the Missing Link Railroad Co., which, with a capital of \$3,000,000, proposes to build a trunk line from Chattanooga, Tenn., to Walhalla, S. C., across Northern Georgia, has been granted.

Atlanta, Ga.—The special committee of the commissioners of Fulton county, Georgia, has recommended the granting of franchises on certain county roads to the Collins Park & Belt Railway, the Atlanta &

Roswell Electric Railway & Power Co., the E. P. Ansley Electric Co. and the Atlanta Railway & Power Co.

Augusta, Ga.—It is reported that the Augusta & Summerville Railway Co. may apply for the use of certain streets for the line in Augusta.

Baltimore, Md.—The municipal board of estimates has approved ordinances granting the Northern Central Railway Co. permission to build certain short switches in the city.

Cedartown, Ga.—A reorganization of the management of the corporation which owns the charter for a railroad from Cedartown to Cave Springs has started the report that the building of the road may be undertaken shortly.

Charleston, W. Va.—Capitalists contemplating the completion of the Charleston, Clendinning & Sutton Railroad to Sutton have returned from an inspection of the road in company with surveyors.

Charleston, W. Va.—It is reported that a railroad twenty miles long will be built up Paint creek from Deigo, where a large tippie will be built.

Charleston, W. Va.—The Pickens & Hackers Valley Railroad Co. has been incorporated to build a road from Pickens, in Randolph county, to Hackers Valley, in Webster county.

Columbia, S. C.—Mr. J. C. Carey and others have applied for a charter for the Lockhart Mills Railroad, to run from Lockhart Mills fifteen miles to a point on the Spartanburg, Union & Columbia division of the Southern Railway between Jonesville and Carlisle.

Columbus, Ga.—Bids are asked for the grading, building and trestling of an extension of the Chattahoochee Valley Railroad from River View, Ala., to within twelve miles of Columbus, upon the completion of which, it is reported, arrangements will be made immediately to build it to Columbus. Mr. L. Lanier of West Point is the president.

Crossville, Tenn.—A spur of the Nashville, Chattanooga & St. Louis Railway has been surveyed from the Bon Air mines at Bon Air, Tenn., to the coal fields farther up the mountain.

Dallas, Texas.—The surveyors of the Texas Trunk and the East Texas & Sabine Pass railways are locating a route northward from Rockland and southward from Kemp to extend the two roads to a connection giving a through line from Dallas to Sabine Pass by way of Athens.

Dardanelle, Ark.—It is announced that canvassers for the \$50,000 bonus to insure the construction of the Dardanelle & Ota Railroad are meeting with success.

Denison, Texas.—It is stated that a favorable report has been made concerning the route of a railroad projected from Denison to Salina, Kans., by the Kansas, Oklahoma Central & Texas Railroad Co., which has its general offices at Watonga, Oklahoma.

Fort Worth, Texas.—It is reported that a charter will be filed for the reorganization of the Texas Western Railroad, equipping it with standard gauge and extending it beyond Sealy.

Fort Worth, Texas.—The grading of the Brazos Valley Railroad from Peck City into Mineral Wells has been completed, and rails have been received.

Frederick, Md.—Franchises for the use of streets have been granted by the towns of Thurmont and Emmittsburg to the Frederick, Thurmont & Northern Electric Railway Co.

Grafton, W. Va.—George C. Sturgiss of Morgantown has been elected president, and R. T. Defries of Wheeling, general manager, of the Central Railroad of West Virginia, which is projected from Morgantown to Charleston by way of Grafton.

Jacksonville, Fla.—It is announced that H. M. Flagler has bought the road running from Jacksonville to Pablo Beach, twenty miles, and will lay and equip it with heavier rails.

Joplin, Mo.—Application has been made for a franchise for an electric railway to connect Joplin with Belleville, Central City, Duenweg and other camps in the mining district.

Knoxville, Tenn.—It is reported that the Chester & Lenoir Railroad, running from Chester, S. C., to Lenoir, N. C., is to be extended by way of Boone, N. C., Cook Gap and down the Avantuga river to Elizabethton, Tenn.

Little Rock, Ark.—The Searcy & West Point Railroad Co. and the Des Arc & Northern Railroad Co. of Arkansas will be, it is announced, consolidated so as to form a continuous line between Searcy and Des Arc, after a proper survey has been made.

Louisville, Ky.—It is reported that the Big Four system will extend its yards over property recently purchased by it for \$20,000.

Luxora, Ark.—An extension of the Decker-ville, Osceola & Northern Railroad will be built to a point five miles north of Luxora, where saw mills will be established.

Mt. Savage, Md.—The Cumberland & Pennsylvania Railroad Co. will put in new yard tracks at Mt. Savage on a tract of land purchased from the Union Mining Co. for \$2100.

Newport, Tenn.—Citizens of Cocke county have been asked to give the right of way for the construction of a railroad, probably a narrow-gauge, from Newport to Waynesville, N. C.

Pensacola, Fla.—The Louisville & Nashville Railroad Co. has purchased lands between their shops and the Muscogee wharf on which it will lay additional tracks to accommodate its export business.

Richmond, Va.—Condemnation proceedings of lands in Chesterfield county for the benefit of the Farmville & Powhatan Railway Co. are under way.

Roanoke, Va.—Work has begun upon the construction of a three-mile spur from a point near Starkey's, on the Winston-Salem division of the Norfolk & Western Railway, to iron-ore fields in the Red Hill section of Roanoke county.

Spencer, Tenn.—Citizens of Van Buren county have been asked to vote \$50,000 of bonds to insure the construction of the Tennessee Central Railway through that county.

Texarkana, Ark.—It is reported that surveys have been undertaken with a view to making Natchez, Miss., the terminus of the Louisiana & Arkansas Railroad, which has been completed to Minden, La., a distance of eighty miles from Stamps, Ark.

Union, Mo.—Citizens of Franklin and Gasconade counties are endeavoring to secure the extension of the St. Louis, Kansas City & Colorado Railroad, which now runs from St. Louis to Union, through their section to Kansas City or the Gasconade river.

Wallisville, Texas.—Financiers of New York are discussing the feasibility of constructing a railroad from Liberty, on the Southern Pacific Railroad, to Wallisville, a distance of about twenty miles.

Street Railways.

Augusta, Ga.—The Augusta Railway & Electric Co. has asked the city council for the privilege of laying a new line of tracks through the city.

Charlotte, N. C.—Books have been opened for subscriptions to the stock of the City & Suburban Electric Railway Co. Mr. J. A. Durham and others are incorporators of the company.

Kansas City, Mo.—It is announced that work will begin at once on extensions of the East Side Electric Railway Co.

New Orleans, La.—An ordinance is pending in the city council to permit St. Charles Street Railroad Co. to extend its tracks at both ends of its line.

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Blower.—See "Foundry Equipment."

Boiler and Engine.—See "Saw-mill Machinery."

Boiler and Engine.—H. T. Shaw, Madison, Ga., is in the market for second-hand 100-horse-power engine and 125-horse-power boiler.

Boiler and Engine.—A. W. Feeney, Huntsville, Ala., is in need of a 40 or 50-horse-power engine and boiler, new or second-hand.

Boiler, Engine, etc.—William J. Henderson, P. O. Box 642, Macon, Ga., wants prices on a portable boiler and engine and saw mill complete, about twenty-five horse-power, new or second-hand.

Building Materials.—Fort Valley Cotton Mills Co., Fort Valley, Ga., desires bids for 800,000 to 1,000,000 bricks and 400,000 to 500,000 feet of yellow-pine lumber, delivered.

Calcium Carbide.—The Shoop-Withers Co., 35 East Washington street, Norfolk, Va., wants to correspond with manufacturers of or dealers in calcium carbide.

Ceilings.—Habig & Stegmaier, 9 N. Center street, Cumberland, Md., will need steel ceilings.

Cement, Piping, etc.—Sealed proposals will be received until September 19 for furnishing Portland cement, sand, broken stone, cast-iron draining pipe and fittings for the new building for government printing office; information furnished on application; John Stephen Sewell, lieutenant engineers, U. S. Engineer Office, 735 North Capital street, Washington, D. C.

Cornishes.—Habig & Stegmaier, 9 N. Center street, Cumberland, Md., will need cornishes.

Cotton Mill.—J. S. Barrow, Louisburg, N. C., wants estimates on a cotton-rope and cotton-twine plant.

Cotton Mill.—Anthony Cotton Mills, Wilson's Mills, N. C., wants to correspond with manufacturers relative to equipping a small yarn mill.

Cotton-oil Mill.—Jos. Pellerin, Breaux Bridge, La., wants bids on a 10-ton cotton-seed-oil mill.

Drills.—Sealed proposals will be received until September 20 for furnishing one core drill. Proposals must be sealed and addressed to the board of awards, care of J. Frank Supplee, city register, Baltimore, Md., and marked "Proposals for Special Core Drills." A certified check for \$100 must accompany each bid. Usual rights reserved; Chas. E. Phelps, Jr., city engineer, city hall annex.

Electric Plant.—See "Railway Equipment."

Electric-light Plant.—The city of Bay St. Louis, Miss., will invite bids for establishment of electric plant. Address "The Mayor."

Electric-light Plant.—The city of Durant, Miss., will receive bids for construction of a \$10,000 electric-light plant until September 26. All bids must be accompanied by certified check for \$500, made payable to the town treasurer. Usual rights reserved. Address J. C. Hill, mayor.

Elevator.—Habig & Stegmaier, 9 N. Center street, Cumberland, Md., will need an elevator.

Engine.—Wanted.—A second-hand Corliss engine of about 75 horse-power. Address D. E. Waggoner, cashier First National Bank, Ladonia, Texas.

Engines.—The Peck-Hammond Co., L. W. Hammond, secretary-treasurer, Cincinnati, Ohio, is in the market for gas and gasoline engines from one to fifteen horse-power.

Fascinator Boards.—Burt Kellogg, Rooms Nos. 20 and 44 Euclid avenue, Cleveland, Ohio, wants to purchase boards for making fascimators.

Feed Mill.—M. H. Grabbil, Brughs Mill, Va., is in the market for portable mill to grind feed.

Fire-department Equipment.—J. A. Miller, chief, fire department, Scranton, Miss., wants addresses of parties handling hose carts.

Fireproof Rooms.—George Howard, chairman, Tarboro, N. C., will open bids September 21 for erection and equipping of two fireproof rooms in courthouse and other improvements, steel furniture, etc. Plans and specifications on file in office of city clerk, Ed Pennington, also at office of architect, 56 Metzger Building, Washington, D. C.; check for \$250 to accompany each bid.

Flour-mill Machinery.—A. H. Shank, Boone, W. Va., wants prices on a roller flour mill and grist mill combined.

Foundry Equipment.—Harrisburg Foundry and Machine Works, Harrisburg, Pa., wants (for 84-inch diameter cupola) foundry pressure blower equivalent to Root's No. 7, new or second-hand.

Furnace Coke.—The Cherokee furnace will be in the market for furnace coke. Address J. R. Barber, secretary Cherokee Iron Co., Cedartown, Ga.

Gas and Gasoline Engines.—See "Engines."

Gas Plant (Acetylene) Supplies.—See "Calcium Carbide."

Grist Mill.—See "Flour-mill Machinery."

Ice Factory and Supplies.—The Corinth (Miss.) Coal & Ice Co. will be in the market for some new ice cans 14x14x39 inches, and will consider bids on a 10-ton atmospheric condenser.

Lumber.—Woodward & Son, Ninth and Arch streets, Richmond, Va., are in the

market for several carloads of seven-eighths-inch tongue and grooved "deodorized" lumber, to be used for lining a cold-storage warehouse.

Painting Devices.—Tallassee Falls Manufacturing Co., A. J. Milstead, vice-president, Tallassee, Ala., wants to correspond with manufacturers of pneumatic painting machines.

Machine-shop Equipment.—W. P. Hall, Alcoma, Va., is in the market for small machine for setting boxes in wheels.

Machine Tools.—Chester Telephone Co., Chester, S. C., wants a small new second-hand foot-power screw-cutting lathe, with necessary attachments.

Metal.—J. M. Miner, Ronda, N. C., wants quotations on perforated metal, etc.

Peanut-oil Products.—George D. Lowe, Baxley, Ga., wants information regarding the marketing of oil and cake obtained from peanuts.

Railway Equipment.—The Males Co., Cincinnati, Ohio, is in the market for a large quantity of 20 to 40-pound steel T rails, also a Shay engine, three-foot gauge, from twelve to thirty tons, and direct saddle-tank engines from ten to twenty tons, both standard and narrow gauge; name lowest net spot cash price and delivery point.

Railway Equipment.—E. W. Bishop, Dunmore, Pa., is considering the construction of a switch-back road or an electric line to operate road, light hotels, lake, etc.

Railway Equipment.—E. W. Bishop, Dunmore, Pa., wants to correspond with contractors for construction of electric plant and railway.

Rice Machinery.—W. S. Walker, Mashua-ville, Miss., wants to correspond with manufacturers of rice-husking machines operated by hand.

Saw Mill.—See "Boiler, Engine, etc."

Saw-mill Equipment.—Piedmont Lumber Co., Charlotte, N. C., is in the market for hand saw, shotgun feed on carriage, carriage, gang edger, lumber trimmer, log turners, etc.

Saw-mill Machinery.—M. H. Grabill, Brughs Mill, Va., is in the market for cut-off saw and bench.

Saw-mill Machinery.—Zack Martin, Minden, La., will want saw mill to cut 25,000 or 30,000 feet per day, edger, planer, boiler and engine.

Saw-mill Machinery.—F. Sitterding, Richmond, Va., will want large drum sanders and large band resaw.

Tobacco Machinery.—M. L. Holcombe, Waynesville, N. C., wants estimates on new or second-hand machinery for smoking tobacco factory with capacity of 500 to 1000 pounds per day.

Woodworking Machinery.—Edward T. Dorcus, Port Deposit, Md., wants to correspond with manufacturers of wood-splitting machinery for basket factory.

TRADE NOTES.

Clendenin Bros. Secure Geo. H. Harper.—Messrs. Clendenin Bros. of 111 South Gay street, Baltimore, Md., announce that on August 31 the general management of their sales department was taken by Mr. Geo. H. Harper, formerly with the Matthal-Ingram branch of the National Enamelling & Stamping Co.

Filtering Equipments.—The well-known filters of the New York Filter Manufacturing Co. of 26 Cortlandt street, New York city, continue to be ordered by prominent enterprises both North and South. The latest two orders received from textile companies recently were given by the Clark Fabric Co. of Sidney, N. Y., and the Roanoke Mills, Roanoke Rapids, N. C.

Furniture Factory Sale.—All industries are in an active and improving condition nowadays. In woodworking lines there are many opportunities for the modern "hus-tler." A Southern furniture factory, fully equipped, in a region where raw materials are abundant and shipping facilities available, is offered for sale by one of our advertisers this week. (See card of O. M. Carter.)

Furniture Factory Sale.—Any class of manufacturing that requires various lumb-ers for its conduct finds place in the South. Frequently it happens that an established factory is offered for sale because of legal complications that arise. On October 2 there will be held at Front Royal, Va., a sale to dispose of a complete furniture factory, and this will be an opportunity that should attract attention. Address Giles Cook, Jr., trustee, for information (or see advertisement).

FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

New Corporations.

The Poplarville Bank, a new corporation at Poplarville, Miss., will begin business October 1.

The Farmers' Bank of Ballard county is being organized at Wickliffe, Ky., by Frank Billington and others.

The Farmers' Bank of Powersville, Mo., has been incorporated with \$10,000 capital stock. Carl S. Allen is president, and J. Mills, cashier.

E. M. Carter of New York is interested in the establishment of a new national bank at Greenville, N. C. The capital stock will be \$50,000.

The People's Bank of Sparta, Tenn., has commenced operations with \$25,000 capital stock. J. L. Dibrell is president, and J. K. Williams, cashier.

Frank C. McGhee is president and George S. McGhee cashier of the new Southern Bank, incorporated at Meridian, Miss., with \$15,000 capital stock.

The Watson Investment Co. of St. Louis, Mo., has been incorporated, with \$25,000 capital stock, by L. J. Watson, C. L. Watson and Robert Rutledge.

The Atlantic Building and Loan Association of Baltimore, Md., has been incorporated by Richard J. Hollingsworth, W. Stedman Badgett, Thomas E. Lycett, J. H. Sanner and Frank E. Crew. The capital stock is \$5,000,000.

A new national bank, to have a capital stock of \$1,000,000, is being organized in Baltimore. Clayton Cannon, formerly cashier of the Traders' National Bank of Baltimore, is to be either president or cashier of the new corporation.

New Securities.

Horace Jones of Parnell, Mo., has purchased the \$2500 6 per cent. school bonds of that city.

Toccoa, Ga., will sell at private sale \$9000 6 per cent. school bonds. Address E. Schaefer, mayor.

New Iberia, La., has voted favorably upon the issuance of \$100,000 electric and light and water-works bonds.

The \$7000 township road bonds of Wadesboro, N. C., were purchased by C. M. Burns of that place for \$7,424.89.

The \$17,500 5 per cent. refunding bonds of Daytona, Fla., have been awarded to the Westerly Savings Bank of Rhode Island.

The issue of \$35,000 5 per cent. high-school bonds of Austin, Texas, have been awarded to Mason, Lewis & Co. of Chicago at 106.

The Attorney-General has approved the issuance of \$100,000 general refunding and \$98,000 refunding water bonds of Dallas, Texas.

Greenwood, Miss., will soon issue \$50,000 water-works bonds, unless 20 per cent. of the electors demand an election upon the question.

October 2 will be the limit for sealed bids for the \$65,000 4 per cent. water bonds of Gastonia, N. C. J. F. Love is secretary of the town council.

W. J. Hayes & Sons of Cleveland, O., have been awarded the \$7000 city hall and the \$7000 street improvement 5 per cent. bonds of Victoria, Texas, at 106.21.

Bids will be received for the \$119,000 6 per cent. improvement bonds of Birmingham, Ala. The bonds mature in ten years, the principal and interest being payable in gold.

Proposals will be received for the \$10-

000 20-year and \$12,000 5-20-year optional refunding bonds of Red River county, Texas. Address F. M. Smith, deputy county clerk, Clarksville.

W. J. Hayes & Sons of Cleveland, O., have secured the \$7000 5 per cent. city hall and the \$7000 5 per cent. street-improvement bonds of Victoria, Texas, upon a basis of 106.421 for both issues.

Marshall Hicks, mayor, will receive proposals until September 15 for the purchase of \$190,000 4 per cent. refunding bonds of San Antonio, Texas. Securities are in denomination of \$1000. A certified check for \$2800 must accompany proposals.

Proposals will be received until September 20 by Robert Brydon, city auditor, for the purchase of \$100,000 4 per cent. 30-year coupon bonds of Danville, Va. Principal will mature July 1, 1929; interest will be payable January 1 and July 1. A certified check for 5 per cent. of the value of the bonds must accompany each proposal.

Financial Notes.

The clerks of the Atlanta banks are forming an association.

The total deposits in the six national banks of Kansas City, Mo., are more than \$44,000,000.

The American Car & Foundry Co. has declared a dividend of 1 1/4 per cent. on the preferred capital stock.

A 4 per cent. dividend has been declared on the adjustment bonds of the Atchison, Topeka & Santa Fe Railroad Co.

The Atlanta & West Point Railway has declared a dividend of 25 per cent. in division of a surplus, according to a dispatch from Atlanta.

A deed of trust for \$40,000,000 from the St. Louis, Iron Mountain & Southern Railway Co. to the Metropolitan Trust Co. of New York and Robert T. Hutchinson filed at St. Louis required \$20,000 of revenue stamps.

Mr. Walker Hill, president of the American Exchange Bank of St. Louis, who was elected president of the American Bankers' Association at its Cleveland meeting, was born at Richmond, Va., forty-four years ago.

The Rapides Bank of Alexandria, La., which has just declared a semi-annual dividend of 4 per cent., has increased its deposits \$80,000 over what they were last year. Its loans and discounts amount to \$284,399; it has \$50,000 cash in its vaults and \$173,000 owing to it, and a surplus fund of \$30,000.

The Wall Street Journal says: "We understand that in the year ending August 31 the American Cotton Oil Co. earned a surplus over debenture, interest and preferred dividend amounting to about 5 per cent. on the common stock. The result was obtained in the face of unfavorable conditions."

Sturtevant Generating Sets.—It is now nearly ten years since the B. F. Sturtevant Co. of Boston first began to design and build its own electric motors. Although originally designed solely for fan propulsion, these motors were soon built as independent machines, and to a still greater extent as dynamos for direct connection to Sturtevant engines. Today the Sturtevant generating set stands as well established as does the well-known Sturtevant fan, and covers a field peculiarly its own—that of the small set with high-grade and high-speed automatic engine.

Satisfactory Wharf Drop.—Repetition of orders for any equipment is readily understood as signifying the purchaser's full satisfaction with the equipment in question. Such repetition is seen in the action of the Clyde Steamship Co. in ordering six sets of the Winter patent wharf drop gearing for one of its New York city piers. The company has eighteen sets of this equipment in use at one of its Philadelphia wharves. Philadelphia & Reading Railroad Co. also ordered seven sets of this same drop for

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its Philadelphia wharves, making about forty that it has altogether. The American Ship Windlass Co. of Providence, R. I., is the manufacturer of the popular wharf drop referred to.

Modern Plumbing House in Cuba.—A modern plumbing business and plumbing supply house will be established at Havana, Cuba, by Mr. Adolph Mueller, for some years connected with the Ahrens & Ott Manufacturing Co. of Louisville, Ky. Mr. Mueller's special study for several years has been high-grade sanitary plumbing and the essentials of plumbing fixtures necessary to produce the best results. He has, moreover, a ready familiarity with the Spanish language, acquired in a former stay of twelve years in Cuba, and a thorough knowledge of the inhabitants and their customs. A large building has been secured, and the new firm will at once equip it with a complete line of the appliances, such as sanitary enamelled ironware, brass, iron and marble goods, used in the installation of plumbing, gas and steam fitting, etc. The new enterprise will be closely connected with the Ahrens & Ott Manufacturing Co. and doubtless will achieve success.